

REPORT

OF THE

Minister of Lands, Forests and Mines

OF THE

PROVINCE OF ONTARIO

For the Year Ending 31st October

1918

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THE LEGISLATIVE ASSEMBLY OF ONTARIO



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Stand of Second-Growth White Pine.

Report of the Minister of Lands, Forests and Mines of the Province of Ontario.

For the Year Ending 31st October, 1918.

To His Honour the Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I have the honour to submit for the information of your Honour and the Legislative Assembly a report for the fiscal year ending 31st October, 1918, of the management of the Crown Lands of the Province.

CLERGY LANDS.

The collection on account of Clergy Lands was \$355.40. No land was disposed of during the year. (See Appendix No. 4, page 19.)

COMMON SCHOOL LANDS.

The collection on account of former sales was \$7,341.97. (See Appendix No. 4, page 19.)

GRAMMAR SCHOOL LANDS.

The area of these lands sold during the year was 47 acres for \$58.75. The collection on account of these and former sales was \$288.00. (See Appendix No. 4, page 19.)

UNIVERSITY LANDS.

The area of these lands sold during the year was 1,288.25 acres for \$786.01. The collection on account of these and former sales was \$1,417.31. (See Appendix No. 4, page 19.)

CROWN LANDS.

There was sold during the year for agricultural and town site areas 51,401.22 acres for \$39,775.01. The collection on account of these and former sales was \$50,253.53. There was sold for mining purposes 12,125.64 acres for \$32,180.67. There was collected on account of these and former sales \$33,535.58.

There was leased for mining purposes 3,119.46 acres for \$3,040.04. There was collected on account of these leases and those of former years \$14,009.15. There was leased of Crown lands an area of 35,424.36 acres for \$3,535.45. There was collected on account of these and the leases of former years \$68,700.58.

The total area of Crown lands disposed of by sale and lease during the year was 103,701.59 acres for a value of \$80,345.43, as compared with 165,628.06 acres sold and leased in 1917 for \$140,948.30. The total collection on account of the sales, leases, etc., was \$176,966.17. (See Appendix No. 3, page 18.)

SALES.

From Appendix No. 15 one will get a detailed statement of all land sales and patents other than those appearing in Free Grant territory. As was expected and predicted last year the number of sales made and the number of purchasers have very perceptibly dropped. For the fiscal year ending 31st October, 1918, practically only one half of the previous year's settlement was accomplished. The source of supply throughout the war was extremely limited, Ontario being the only field in effect upon which to draw, and the war with its various activities tended most acutely to render it almost impossible to secure the needed settlers. Numbers of the hardy settlers of the North at the call to arms dropped the plough and went forth to their duty, and some of the patented lands thus left were no doubt requisitioned by friends and others who might otherwise seek their own homesteads from the Crown. Over 600 settlers on Crown Lands in the North, to the knowledge of the Department, enlisted in the Canadian Expeditionary Forces, and, while numbers of these paid the supreme sacrifice, it is confidently predicted that the others, who seemed satisfied with their lot in their pioneer homes in Ontario will in time return to their farms, which have been retained for them. It is not unreasonable to expect that each will induce his friends to try their lot in the clay belt of Ontario, where health and plenty wait the willing worker.

As immigration conditions are but problematical it is impossible to adequately forecast an immediate return to a normal improvement in land purchases.

FREE GRANTS.

As predicted in the report for last year there is a notable reduction in the number of Free Grant locations effected throughout the fiscal year ending October 31st, 1918; only 372 Free Grant settlers acquired free homesteads for an area of 48,687 acres, whereas during the previous year over 600 secured locations. An additional area of 4,570 acres was taken by 110 locatees, who had the privilege of purchasing an adjoining farm for grazing or agricultural purposes.

The number permitted to assign their interests in locations to parties entitled and prepared to continue settlement totalled 166, as against 217 for the year 1917. Patents to the number of 406 were issued, slightly less than for the corresponding period immediately preceding.

Conditions imposed by the war and the general decline for Free Grant, as for other class of farm land, have materially contributed towards the declining figures in Free Grant transactions. Many of the townships in Free Grant territory appearing in Appendix No. 14 have been opened for years and practically all the choice land therein has been sought, but so long as an occasional lot may be left and desired the township remains in the market and attached to a regular agent. No new townships were opened during the year under the Free Grant Section of the Public Lands Act as the necessity did not exist, and only the future can with a degree of certainty say to what extent the demand for Free Homestead Land may grow, but at present the outlook for transcending the figures of but a few years ago is not of the brightest.

Under the Returned Soldiers' and Sailors' Land Settlement Act, 1917, free locations along with other privileges were given to 53 returned men, 49 in the Township of O'Brien for 5,018 acres, and 4 in the Township of Owens for 477 acres.

A list of the islands disposed of for Summer Resort purposes in Free Grant territory, may be found in Appendix No. 14.

MILITARY GRANTS.

Under the Veteran Land Act I. Edward VII., cap. 6, and amendments thereto have been issued 13,998 certificates, and although the time for receiving applications for these grants expired on the 30th September, 1908, there are still letters being received from men who were entitled to this grant, but claim that they have only now become aware of the fact. The applications therefore could not be accepted and no forms of applications have been sent out.

During the past year there have been located 23 of these certificates covering 3,678 acres in the townships open for veterans, making in all a total of 8,284 certificates thus located.

In eleven cases the certificates have been surrendered and applied in payment of lands purchased from the Crown, covering in all 1,760 acres making a total of 785 that have thus been applied.

There were three certificates surrendered to the Crown for the \$50.00 commutation money, making a total of 3,260 certificates surrendered in this manner.

During the year there have been issued 115 patents for lands located by veterans, and in all 7,337 have thus been disposed of.

The total number of certificates that have therefore been disposed of is 12,329 leaving 1,669 that are still outstanding.

During the year 15 veteran locations, covering 2,392 acres, were cancelled for the non-performance of the settlement duties to which they became subject on account of being assigned before patent was issued.

Under the Act I., Edward VII., cap. 6, and amendments thereto covering these grants it is necessary for all locatees of the lands granted under this Act to apply for their patents for such lands before ten years have expired from date of location. If this application for patent is not made within ten years then the land comes under the settlement regulations, and unless the settlement duties are proceeded with, the locations are liable to cancellation. Previous to the expiration of the ten years after location, the Department has sent a notice to each veteran, who should apply for his patent stating this fact, and in this manner have saved many of the locations from becoming subject to the settlement duties. See Appendix No. 11.

PATENTS, LEASES, LICENSES, ETC.

In consequence of the growing diminution during war period of land seekers and land tillers in the northern sections, fewer engrossed instruments were issued during 1918 than the previous year by over four hundred, some 1,778 having been prepared last year, as against only 1,351 for this year. These were made up of 741 settlers' patents, 337 mining and 115 veteran grants; the remaining numbers consisted of Crown Leases to the number of 20 covering a variety of subjects, including water powers, sand and gravel, ranching, etc. Of the last class eight were issued, an increase of seven over the preceding period, probably the most important ranch lease having been issued for a three thousand acre block in the Peterborough district, in Cavendish Township, where already some 350 head of cattle are being regularly maintained; inquiries in respect of the grazing possibilities and the opportunities offered are being constantly made, and the hope is expressed that in the reconstruction period, when the problems of employment and production with their concomitant economic interests are being solved, the vast acres of Ontario waste lands, now unproductive, will not be overlooked as a means to an important end.

Equally important with the growing of grain is the raising of cattle and sheep, and already it has been demonstrated in parts of the hitherto so-called useless areas of Old Ontario that the application of a little scientific knowledge and practical energy has resulted in successful cattle and sheep enterprises. Wherever and whenever Crown Lands are desired for such purposes and *bona fide* dealers make application an officer of the Department, at its expense, makes a cruise, preferably in company with the applicant, reports fully as to the wisdom of the selection, and makes any suggestion or recommendation that may be to the mutual advantage of all interested. The annual rental for ranching leases is only five cents an acre and the stocking requirements are reasonable, every effort being made to keep them from appearing prohibitive.

Approximately the same number of Licenses of Occupation issued for the year ending October 31st, 1918, some fifty, as the previous year. These included mining, lumbering, custom house sites, game and fisheries, sugar making, pipe lines, rights of ways, settlers' rights, water powers, tile manufacture, and a variety of other subjects. Rights to remove sand and gravel under certain conditions were granted to eighteen different individuals or concerns by special leases.

Sixty-eight mining leases were issued and also two leases for islands in Lake Timagami.

Under Appendix No. 8 may be found a detailed statement of all instruments prepared and issued during the fiscal year.

FINANCIAL ASSISTANCE TO SETTLERS.

Since August 12th, 1916, 1,839 applications for loans have been dealt with by the Settlers' Loan Commissioner—1,306 loans totalling \$419,286.00 have been made.

Among the benefits derived in this connection might be mentioned, increased acreage placed under cultivation, larger holdings of live stock, and improved buildings.

Payments of accrued interest and maturing principal have been remarkably prompt.

A loan of \$12,000.00 was made to the Sudbury Co-operative Creamery Co. during the fiscal year just closed. Other loans to creameries, grist mills and cheese factories will doubtless be required.

THE MINING INDUSTRY.

The mining industry of Ontario was greatly affected by the war. Nickel and copper are prime requisites for modern warfare, and the production of these metals in 1918 was on a larger scale than ever before. Silver was needed in huge quantities for the payment of troops, as well as to purchase the exportable products of silver-using countries, which owing to war conditions could not be paid for by exchange of goods. These metals have ruled at high prices, and the mining districts of Sudbury and Cobalt had a prosperous year.

Gold being the basis of international finance, was also in great demand, but as the increased cost of production, because of the fixed price of gold, could not be shifted to the consumer as in the case of the other metals, this branch of the industry was less active than it would otherwise have been. Notwithstanding this, however, the production for 1918 was slightly greater than that of the previous year. The gold camps of Porcupine and Kirkland Lake will undoubtedly, when normal prices for labour and supplies are restored, resume their former activity and undergo rapid development, and the newer areas, such as Boston Creek, Matachewan, etc., will be vigorously exploited. The growth of the mining

industry will greatly assist in the settlement of the agricultural districts of northern Ontario, since it provides a ready market for all kinds of farm products, attracts population, and furnishes employment for labour. The mining areas so far developed are, for the most part, near or within the limits of the agricultural districts, thus bringing producer and consumer into proximity and lessening transportation charges.

The mattes produced at the Sudbury smelters in 1918 contained about 44,700 tons of nickel as compared with 41,887 in 1917, and the value was say, \$26,800,000 as against \$20,493,500. The copper contents of the mattes was about 23,000 tons, valued at \$8,500,000, compared with 21,197 tons in 1917 worth \$7,842,290. The producing companies were: The International Nickel Company of Canada—a re-organization of the Canadian Copper Company and subsidiary concerns—and The Mond Nickel Company. The Alexo mine in Dundonald also contributed 10,000 or 12,000 tons of ore, which was smelted by the Mond Company at Coniston. The International Nickel Company's refinery at Port Colborne was completed during the year and put into successful operation, and has a refining capacity of 10,000 tons of nickel and a corresponding quantity of copper per annum. The British America Nickel Corporation has been steadily developing the Murray mine, and is constructing a smelter and refinery. Owing to the difficulty of obtaining a suitable supply of electric power at the mine, the latter is being erected at Hull, Quebec.

The production of silver amounted to about 17,500,000 ounces, worth \$16,675,800 as against 19,479,692 ounces in 1917, worth \$16,183,208. In value, last year's silver production was only exceeded in the history of the Cobalt camp by that of 1912, when it was \$17,408,935. The total yield of silver from these mines up to the end of 1918, has fallen little short of 300,000,000 ounces. The leading producers were the Nipissing, Mining Corporation, Kerr Lake, O'Brien, Coniagas, and McKinley-Darragh-Savage. The high price of silver not only stimulated production, but also exploration, and a number of prospects within the boundaries, or at the verge of the territory of proven value have been and continue under development.

Iron ore was produced to the extent of 154,243 tons during the first nine months of the year. With the exception of small shipments from a couple of mines in Eastern Ontario, this all came from the Magpie and Moose Mountain mines. The total quantity of pig iron produced by the blast furnaces of the Province was about 890,000 tons, valued at say \$20,000,000. To produce this, about 1,500,000 tons of iron ore were required, nearly all of which was imported from the United States.

Many minor minerals are raised in Ontario which form the bases of important and expanding industries. Iron pyrites, for example, which was mined chiefly in northwestern but also in eastern Ontario, was in large demand by the United States' makers of sulphuric acid, of which very large quantities were required for the manufacture of explosives. Imports of elemental sulphur from Sicily were entirely cut off by the war, and the deposits in Louisiana and Texas were not equal to supplying the demand for sulphur, consequently the pyrite deposits of Ontario were drawn on during the year for large shipments. It is estimated that about one-third of the total pyrite consumed by the United States during 1918 came from Ontario.

Cessation of the war will probably lead to a lessened demand for nickel, copper, pyrite, and perhaps some of the other mineral products of the Province, but as peaceful industry is again re-organized and re-established, it is quite probable that the requirements for manufacturing and trade will ere long restore the demand to at least its former level.

COLLECTIONS.

The total revenue of the Department from all sources was \$2,964,161.76. Of this, \$50,253.53 came from agricultural lands and town sites; mining lands, \$33,535.58; mining and Crown leases, \$83,774.38; miners' licenses, permits and recording fees, \$52,271.86; supplementary revenue tax, \$919,208.80. From woods and forests the revenue was \$1,756,085.25, made up of the following items, bonus, \$679,304.17; timber dues, \$795,004.08; ground rent, \$87,263.93; transfer fees, \$4,740.00; fire protection charge, \$189,773.07. (See Appendix No. 4, page 19.)

DISBURSEMENTS.

The total expenditure of the Department for ordinary service was \$965,615.73. Some of the principal items were: Crown Land agents' salaries and disbursements, \$18,202.13; homestead inspectors, \$14,978.75; Crown timber agents, \$31,088.07; forest ranging and estimation of timber, \$125,474.84; fire ranging, \$394,784.90; forest reserves, fire ranging, etc., Temagami reserve, \$48,009.52; Mississauga reserve, \$24,454.34; Nipigon reserve, \$23,457.35; Eastern reserve, \$3,424.13; Sibley reserve, \$100.00; mines and mining, \$60,802.72; mining recorders, \$23,630.95; surveys, \$40,827.29; investigation of tree diseases, \$5,410.53; contingencies, land and forests, \$39,947.14; Bureau of Mines, \$12,653.85; forestry, \$3,221.80; colonization, \$1,072.38.

A further sum of \$50,907.28 was expended under the direction of the Department, distributed as follows: Algonquin Park, \$29,866.03; Quetico Provincial Park, \$9,424.20; Veteran's Commutation, \$150.00; Royal Nickel Commission, \$10,182.05; legal investigations, \$1,285.00.

The sum of \$55,027.49 was disbursed under the provisions of the Bounty Act, Edward VII, Cap. 14. (See Appendices Nos. 6 and 7.)

WOODS AND FORESTS.

The accrued revenue from Woods and Forests for the year ending October 31st, 1918, amounted to \$1,635,684.43 which exceeded that of the previous year by \$139,620.98.

The revenue collected during same period totalled \$1,756,085.25, or \$60,382.17 in excess of amount collected during year ending October 31st, 1917.

The production of pine timber, saw log and dimension timber—during season of 1917-18 while very much less than during the seasons of 1914-15 and 1915-16 exceeded that for 1916-17 by over fifteen million feet board measure, a satisfactory increase in view of the prevailing labour conditions. With labour conditions rapidly improving and with increased demand for lumber both at home and abroad it is confidently expected that the production during the coming season will show a still greater increase.

In timber other than pine there was a falling off in production of nearly eight million feet board measure.

Over half a million more railway ties were taken out last season, the figures being 2,094,099, as against 1,544,826 for 1916-17.

Three hundred and thirty-eight thousand, five hundred and sixty-three cords of pulpwood were taken off Crown Lands an increase of 114,892 cords over the previous season.

The sale of the Kapuskasing Pulp and Timber Limit to which reference was made in 1917 report has since been carried out.

LANDS UNDER LICENSE.

The area under license at the close of the fiscal year was 16,888 square miles which was $57\frac{1}{4}$ square miles greater than for previous year.

Summary of Revenue from Woods and Forests.

Timber dues	\$795,004 08
Bonus	679,304 17
Ground rent	87,263 93
Transfer fee	4,740 00
Fire protection	189,773 07
	<hr/>
	\$1,756,085 25

CULLER'S EXAMINATION.

Two examinations were held during the year, one at North Bay and one at Kenora. Two candidates succeeded in passing the examination and were duly granted certificates authorizing them to act as Cullers. For names of Cullers who passed at these examinations, see page 63, Appendix 12. For complete list of Licensed Cullers see Minister's Report for 1917.

FIRE RANGING.

As pointed out in the Annual Report for 1917, some decided changes were made in methods of forest protection in conformance with the legislation passed during the session of 1917.

During the season of 1917-18, 9,590 permits for the burning of slash by settlers were issued as against 3,486 permits for the previous season. The acreage covered by these permits for the present season amounted to 39,683 as against 15,186 acres for the previous season. The permits are issued by members of the fire ranging staff, and, generally speaking, the settlers co-operate heartily and appear to appreciate the wisdom of the new regulations.

There were five prosecutions for infringements of the regulations under the Forest Fires Prevention Act, and convictions were registered in all cases.

The area protected was re-grouped, the new arrangement providing for 32 districts instead of 34, each district being in charge of a chief ranger as formerly. The number of territorial inspectors was increased to four instead of three as formerly, their headquarters being at Cochrane, Nipigon, Sudbury and Parry Sound, respectively. The general field work was supervised by a Provincial Superintendent with headquarters at Sudbury.

The maximum number of rangers and supervising officers was 1,190.

Improved methods were adopted to enable a closer check to be kept on the work of all men engaged in forest protection.

FOREST FIRES.

The weather, generally speaking, was favourable for forest protection. As in the case of last season, the railways furnished the most fruitful cause of fires. Over 46 per cent. of the fires reported were of railway origin. Approximately 10 per cent. of the fires reported were caused by careless campers. Eight per cent. of the total number of fires appear to have been caused by the land-clearing operations of settlers.

IMPROVEMENT WORK.

During the season, twelve lookout towers were constructed. Three hundred and four miles of new trails were cut out, and some improvements were made in the telephone systems. Fifty-eight rangers' cabins were constructed, also two boat houses, one motor car house and one garage. Numerous other improvements of a minor nature were made.

EQUIPMENT.

Additions were made to the equipment as follows: 5 Ford auto trucks; 5 portable fire pumps; 5 large boats; 3 railway motor cars; 36 railway velocipedes; 100 tents and 65 canoes. Fire signs were very widely distributed and a large number of calendars were also issued for educational effect. A booklet of instructions for all men in the field was printed and a copy furnished to each employee.

FORESTRY.

The work of the Provincial Forestry Station in Norfolk was continued. A glance at the detailed report of the Forestry Branch will show the magnitude of the work which is being carried on at this point.

TREE DISEASES.

Very important work is being done in connection with the investigation of tree diseases throughout the Province. Valuable investigations were conducted by Dr. J. H. Faull, and his report will also be found included in the general report of the Forestry Branch.

A complete summary of the work of the Forestry Branch will be found in Appendix No. 31, page 142.)

CROWN SURVEYS.

The following surveys of Crown Lands have been carried on during the year:—

Islands in the Georgian Bay and Lake Huron, in the districts of Manitoulin and Parry Sound, which completes the survey of islands in Lake Huron and Georgian Bay under the control of the Province.

Township of Kapuskasing, district of Algoma.

Township of O'Brien, district of Algoma.

Township of Idington, district of Algoma.

Township of Cumming, district of Algoma.

Township of Owens, district of Timiskaming.

Township of Williamson, district of Timiskaming.

The last five mentioned townships were surveyed into one hundred-acre lots, for the purpose of returned Soldiers' and Sailors' Land Settlement.

Traverse of the Namakan River in the district of Rainy River.

Survey of Lower Shebandowan Lake, in the district of Thunder Bay.

Survey of the boundaries of the Black Sturgeon River Pulp and Timber Limit, in the district of Thunder Bay.

Survey of Base and Meridian Lines in the districts of Thunder Bay and Timiskaming.

For Crown Surveys see Appendices Nos. 16 and 17, page 76.

MUNICIPAL SURVEYS.

Four municipalities petitioned for special surveys during the year and instructions were given authorizing the same to be made.

Three municipal surveys for which instructions were previously given were confirmed during the year under R.S.O. 1914, Cap. 166, Sections 13 and 14, such surveys being final and conclusive, including a survey of part of the Toronto and Hamilton Highway, between the westerly limit of the Town of Oakville and the City of Hamilton.

Particulars relating to these will be found in Appendices Nos. 18 and 19, pages Nos. 77 and 78.

MAPS.

New editions of the maps comprising the districts in Northern Ontario have been issued during the year and are revised from time to time as new surveys are made and additional information procured.

RETURNED SOLDIERS AND SAILORS—LAND SETTLEMENT.

Work has been continued at the Kapuskasing Colony for Returned Soldiers and Sailors during the past year. Numbers of soldier settlers are now residing on their locations and are directing their energies towards land clearing, cutting pulpwood, etc.

A full report as to the activities at the Colony will be found in Appendix No. 32, page 160.

G. H. FERGUSON,

Minister.

Department of Lands, Forests and Mines,
Toronto, October 31st, 1918.



Ontario Government Creamery, New Liskeard.

APPENDICES

Appendix No. 1.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Lands Branch...	Hon. G. H. Ferguson	Minister	1914, Dec. 22....	\$6,000 00	
	Albert Grigg	Deputy Minister	1915, Oct. 13....	4,200 00	
	C. C. Hele	Minister's Secretary and Secretary to Department	1912, Jan. 23....	2,500 00	
	H. M. Robbins	Assistant to Deputy Minister	1918, Apr. 25....	2,200 00	
	J. Farrington	Clerk	1916, Jan. 6....	1,300 00	
	A. G. Thompson	do	1909, Mar. 24....	1,000 00	
	W. A. Fleming	Stenographer	1915, Feb. 16....	850 00	
	J. J. Murphy	Advisory Chief Clerk	1872, May 1....	2,300 00	
	W. C. Cain	Chief Clerk	1903, Mar. 6....	2,100 00	
	H. E. Johnston	Clerk of Military Grants	1907, Mar. 13....	1,850 00	
	W. R. Ledger	Clerk of Sales	1894, Feb. 5....	1,700 00	
	S. Draper	Clerk of Free Grants	1903, Jan. 1....	1,600 00	
	S. A. Platt	Clerk	1907, Mar. 13....	1,250 00	
	F. Lucas	do	1909, Mar. 24....	1,300 00	
	J. E. Drinkwater	do	1916, May 3....	1,300 00	
	C. S. Jones	Clerk of Patents	1890, May 22....	2,150 00	
	W. S. Sutherland	Engrossing Clerk	1902, Jan. 13....	1,550 00	
	C. E. Burns	Reference Clerk	1900, April 9....	1,650 00	
	W. Carrell	Engrossing Clerk	1904, Jan. 15....	1,450 00	
	A. E. Robillard	do	1894, May 8....	1,200 00	
	A. E. Roe	Clerk of Registers	1909, Mar. 24....	1,450 00	
	S. Ross	Stenographer	1917, Oct. 30....	900 00	
	M. Bengough	do	1896, Oct. 23....	900 00	
	J. C. Oram	do	1907, Jan. 16....	900 00	
	E. F. O'Neil	do	1904, Nov. 9....	900 00	
	E. G. Halliday	do	1909, Mar. 24....	900 00	
	B. M. Benson	do	1911, Mar. 3....	850 00	
	E. Hills	do	1916, May 3....	850 00	
	E. Deadey	do	1918, Oct. 16....	800 00	Resigned August 6, 1918.
	L. V. Rorke	Director	1909, May, 5....	3,500 00	
	J. Hutcheon	Surveyor and Draughtsman	1913, May 20....	2,500 00	
	W. F. Lewis	Clerk	1872, Feb. 5....	1,400 00	

Surveys	D. G. Boyd	Draughtsman	1897, Sept. 27	1,850 00
	E. M. Jarvis	Clerk	1904, Oct. 19	1,600 00
	J. B. Proctor	do	1897, Jan. 15	1,400 00
	B. Rushford	Draughtsman	1912, Oct. 5	1,200 00
	F. E. Blanchet	do	1907, Mar. 13	1,300 00
	A. Leaman	do	1909, Mar. 24	1,300 00
	H. Treby	do	1904, Jan. 13	1,450 00
	J. Work	do	1911, Mar. 3	1,450 00
	H. M. Kirkland	Stenographer	1904, Nov. 23	900 00
	C. O'Connor	do	1911, Mar. 3	800 00
Woods and Forests	E. C. Armer	do	1911, Mar. 3	800 00
	J. A. G. Crozier	Advisory Chief Clerk	1867, Dec. 1	2,300 00
	J. Houser	Chief Clerk	1907, Mar. 13	2,000 00
	J. B. Cook	Clerk	1898, Aug. 1	1,950 00
	H. Gillard	do	1900, April 9	1,700 00
	F. J. Niven	do	1903, Mar. 6	1,650 00
	W. F. Trivett	do	1904, Jan. 13	1,500 00
	R. H. Hodgson	do	1904, Nov. 23	1,400 00
	A. H. O'Neill	do	1909, Mar. 24	1,200 00
	G. W. Harris	do	1909, Mar. 24	1,200 00
Accounts	N. L. Rogers	do	1911, Nov. 2	1,300 00
	S. D. Meeking	do	1910, May 12	1,100 00
	E. H. Squire	do	1916, April 6	1,100 00
	E. H. Telfer	do	1916, April 6	1,000 00
	C. Rowland	Stenographer	1915, Mar. 23	900 00
	M. E. Bliss	do	1909, Sept. 1	900 00
	H. Canton	do	1915, Oct. 9	800 00
	D. G. Ross	Accountant	1861, April 15	3,000 00
	H. M. Lount	Clerk	1904, Jan. 13	1,750 00
	C. J. Clarke	do	1907, Mar. 13	1,350 00
Forestry	R. Gordon	do	1913, April 30	1,200 00
	W. A. Burritt	do	1908, April 8	1,350 00
	C. Bowland	Clerk and Stenographer	1911, Mar. 3	900 00
	E. J. Zavitz	Provincial Forester	1912, Nov. 7	3,500 00
	J. H. White	Assistant Provincial Forester	1917, April 1	3,000 00
	F. S. Newman	Forester	1913, Sept. 23	1,800 00
	J. Bald	Stenographer	1914, Oct. 28	800 00

Appendix No. 1.—Concluded.

Return of Officers and Clerks of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Branch.	Name.	Designation.	When Appointed.	Salary per annum.	Remarks.
Colonization	H. A. Macdonell	Director	1910, Feb. 16	2,450 00	
	J. Argue	Clerk	1905, April 1	1,700 00	
	R. A. Jones	do	1909, April 1	1,600 00	
	C. W. Garthwaite	do	1910, Nov. 1	1,300 00	
	H. Tutt	do	1911, Mar. 30	1,200 00	Transferred to Public Works, March 16, 1918.
	S. O. Dennis	Clerk and Stenographer	1910, Nov. 1	900 00	
	R. Duggan	Stenographer	1910, Feb. 1	900 00	
	F. R. Dunlop	do	1913, Jan. 1	825 00	
	B. McDonald	do	1910, Nov. 1	900 00	
Records Branch.	S. K. Burdin	Chief Clerk	1916, April 6	2,400 00	
	C. Dies	Clerk	1907, Mar. 13	1,450 00	
	A. P. Saunders	do	1913, April 30	1,200 00	
	C. W. St. John	do	1910, April 14	1,200 00	
	A. Ferguson	do	1916, April 6	1,300 00	
	W. B. Baines	do	1912, Oct. 5	1,150 00	
	F. Samuels	do	1909, Mar. 24	1,125 00	
	N. Mathewson	do	1918, April 25	1,000 00	
	H. Brophy	Mailing Clerk	1898, Oct. 1	1,100 00	
Bureau of Mines	T. W. Gibson	Deputy Minister	1891, June 19	4,200 00	
	R. D. Fisher	Secretary	1907, Mar. 13	1,700 00	
	D. H. Barr	Clerk	1907, Mar. 13	1,450 00	
	F. L. Godson	do	1915, June 18	1,100 00	
	W. Lemoine	do	1908, April 8	1,350 00	
	Anne Moffatt	do	1901, Mar. 1	1,300 00	
	A. G. Scovell	do	1909, Mar. 24	1,350 00	
	J. L. McNaughton	Clerk and Stenographer	1909, Mar. 24	900 00	
	H. W. Batchelor	Stenographer	1911, Mar. 19	850 00	
	M. Baptie	Clerk and Stenographer	1918, April 11	800 00	
	R. McElree	do	1918, April 11	750 00	

D. GEO. ROSS,
Accountant.ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 2.

List of Agents for the year ending October 31st, 1918.

Name.	Post office address	District of County.	Date of appointment.	Salary per annum.	Remarks.
<i>Land Agents.</i>					
Anderson, T. V.	Hearst	Part District of Algoma	1913, May	600 00	For salary see Homestead Inspector.
Arthurs, E.	Espanola Mills	do do	1915, May	200 00	
Baker, R. H.	Minden	Part Victoria	1907, Oct.	350 00	
Bolger, J. W.	New Liskeard	Lake Temiskaming, District of Nipissing ..	1913, July	900 00	
Both, C.	Denbigh	Part of Frontenac and Addington	1905, Oct.	200 00	
Brown, John	Markstay	Part of District of Nipissing and Sudbury ..	1916, June	500 00	
Brown, J. B.	Brazebridge	Muskoka District	1905, July	28	
Burrows, W. A.	Port Arthur	Part District of Thunder Bay	1912, Jan.	30	
Cameron, W.	Stratton Station	do do Rainy River	1911, April	27	
Campbell, I. M.	Parry Sound	do do Parry Sound	1914, Nov.	12	
Dempsey, S. J.	Cochrane	do do Nipissing	1911, Feb.	9	Also Mining Recorder.
Dodds, T.	Thessalon	do do Algoma	1915, May	4	
Douglas, W. J.	Maynooth	do Hastings	1912, June	12	
Ellis, H. J.	Powassan	do District of Parry Sound	1909, May	21	
Freeborn, Dr. J. S.	Magnetawan	do do do	1905, Nov.	10	
Gibson, J. E.	Dryden	District of Rainy River	1914, Nov.	20	
Ginn, F. E.	Matheson	Part District of Nipissing	1912, Mar.	20	
Hales, W.	Apsley	do County of Peterborough	1911, July	20	
Hollands, C. J.	Fort Frances	do Township of Alberta and part District of Rainy River	1892, Oct.	12	
Jenkin, W.	Emsdale	do District of Parry Sound	1908, July	29	Also Mining Recorder.
McFayden, A.	Emo	do do Rainy River	1905, Sept.	8	
MacLennan, J. K.	Sudbury	do do Sudbury	1905, July	3	
Noble, E.	Sault Ste. Marie	do do Algoma	1913, Feb.	1	
Parsons, W. J.	North Bay	do do Nipissing	1908, April	8	
Phillon, J. A.	Sturgeon Falls	do do do	1907, Sept.	13	
Prince, A.	Wilno	do of Renfrew	1905, July	12	
Small, R.	Mattawa	do District of Nipissing	1910, June	30	
Spry, W. L.	Kenora	do do Rainy River	1909, Sept.	21	
Teasdale, R. A.	Massey	do do Sudbury	1917, July	1	Also Mining Recorder.
Watt, F.	Pembroke	do of Renfrew	1913, May	28	
Whybourne, W. E.	Marksville	do of St. Joseph Island	1905, April	7	
Wilson, A. N.	Kimnount	do of Peterborough	1915, June	1	
Woolings, J.	Englehart	do of District of Nipissing	1908, June	30	

Appendix No. 2.—Continued.

List of Agents for the year ending October 31st, 1918.

Name.	Post office address	District of County.	Date of appointment.	Salary per annum.	Remarks.
Homestead Inspectors.					
Barr, J.	Fort Frances ...	District of Rainy River	1906, Nov. 23	1,200 00	Also Crown Lands Agent.
Bastien, J. A.	Chelmsford	W. part of Sudbury District	1913, May 2	900 00	
Brown, J. B.	Bracebridge	Muskoka District	1905, July 28	1,000 00	
Burnes, C. W.	South River	Parry Sound District	1905, Nov. 15	1,000 00	
Cragg, W. V.	New Liskeard	S. part of Temiskaming District	1913, Mar. 27	1,200 00	
Dean, T.	Sault Ste. Marie.	Algoma District	1908, July 29	800 00	
Hughes, T.	Murillo	Thunder Bay District	1908, July 20	1,000 00	
Quenneville, I.	Sturgeon Falls ..	E. part Sudbury and W. part Algoma Dis- tricts	1906, May 7	900 00	
Owens, H. B.	Cache Bay	E. part Sudbury and W. part Algoma Dis- tricts	1918, June 25	800 00	
Smith, D.	Cochrane	N. part of Temiskaming District	1912, April 16	1,500 00	
Watson, T. P.	Englehart	Centre part of Temiskaming District	1905, May 10	1,200 00	
Wigle, R. G.	Dryden	Kenora District	1914, May 27	1,200 00	
Timber Agents.					
Brenner, G.	Cochrane	Part Temiskaming and Algoma Districts ..	1913, May 20	1,800 00	Died November 22, 1917.
Christie, W. P.	Parry Sound	Part Parry Sound and Muskoka Districts ..	1903, Dec. 4	1,600 00	
Darby, E. J.	Ottawa	Part Ottawa District	1889, July 26	1,500 00	
Hawkins, S. J.	Webbwood	Part Algoma and Sudbury Districts	1905, Aug. 16	1,600 00	
Henderson, C.	Sudbury	do	1902 Jan. 1	2,000 00	
Huckson, A. H.	Sault Ste. Marie.	Part District of Algoma	1914, April 1	1,800 00	
Johnson, S. M.	Arnprior	Part Ottawa and Parry Sound Districts ..	1907, Jan. 11	1,600 00	
MacDonald, S. C.	New Liskeard	Part Temiskaming District	1907, Jan. 21	1,700 00	
Margach, W.	Kenora	Kenora District	1889, May 16	1,600 00	
McDonald, H.	Thessalon	Part District of Algoma	1905, April 20	1,500 00	
McDougall, J. T.	North Bay	Nipissing and Part Sudbury District	1908, July 8	1,700 00	Resigned October 1, 1918.
Oliver, J. A.	Port Arthur	Thunder Bay District	1905, Sept. 30	1,700 00	
Stevenson, A.	Peterborough	Belleville	1905, Oct. 4	1,500 00	
Watts, G.	Fort Frances	Rainy River District	1910, April 19	1,500 00	
Wood, W. G. A.	South Porcupine.	Porcupine District	1917, Feb. 28	1,400 00	

<i>Mining Recorders.</i>					
Browning, A. J.	Elk Lake	Montreal River Mining Division	1913, July 15	1,200 00	Died April 30, 1918.
Campbell, C. A.	Sudbury	Sudbury Mining Division	1910, Jan. 6	1,200 00	
Gauthier, G. H.	South Porcupine	Porcupine Mining Division	1912, July 16	1,500 00	
Hough, J. A.	Matheson	Larder Lake Mining Division	1907, May 22	1,400 00	
Miller, N.	Sault Ste. Marie	Sault Ste. Marie Mining Division	1915, June 9	1,100 00	
Morgan, J. W.	Port Arthur	Port Arthur Mining Division	1906, Dec. 28	1,100 00	
Morgan, M. R.	Tashota	Kowkash Mining Division	1916, Mar. 10	1,000 00	Resigned August 31, 1918.
McAulay, N. J.	Haileybury	Temiskaming Mining Division	1915, May 8	1,900 00	
McQuire, H. F.	Parry Sound	Parry Sound Mining Division	1906, Sept. 26	500 00	
Sheppard, H. E.	Elk Lake	Gowganda Mining Division	1909, Feb. 10	1,100 00	
Spry, W. L.	Kenora	Kenora Mining Division	1909, Sept. 21	900 00	Also Crown Lands Agent.
<i>Emigration Agents.</i>					
Reid, R.	London	England	1913, Feb. 7	6,500 00	Died October 21, 1918.
Clark, J. M.	London	do	1913, Mar. 17	3,500 00	

D. GEO. ROSS,
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ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 3.

Statement of Lands Sold and Leased. Amount of Sales and Leases and Amount of Collections for the year ending October 31st, 1918.

Service.	Acres sold and leased.	Amount of sales and leases.	Collection on sales and leases.
<i>Lands Sold:</i>		\$ c.	\$ c.
Agricultural and Townsites.....	51,401.22	39,775 01	50,253 53
Mining	12,125.64	32,180 67	33,535 58
Clergy Lands			355 40
Common School Lands	292.00	906 50	7,341 97
Grammar School Lands	47.00	58 75	288 00
University Lands	1,288.25	786 01	1,417 31
<i>Lands Leased:</i>			
Mining	3,119.46	3,040 04	14,009 15
Crown	35,424.36	3,535 45	68,700 58
Temagami	3.66	63 00	1,064 65
	103,701.59	80,345 43	176,966 17

D. GEO. ROSS,
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Appendix No. 4.

Statement of Revenue of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Service.	\$ c.	\$ c.	\$ c.
LAND COLLECTIONS.			
<i>Crown Lands:</i>			
Agricultural	45,748 83		
Townsites	4,504 70		
		50,253 53	
Mining Sales		33,535 58	
Clergy Lands.....	355 40		
Common School Lands	7,341 97		
Grammar School Lands	288 00		
University Lands	1,417 31		
		9,402 68	
<i>Rent:</i>			93,191 79
Mining Leases	14,009 15		
Temagami Leases	1,064 65		
		15,073 80	
Crown Leases	19,628 53		
Sand and Gravel Royalty	29,464 21		
“ “ Rentals.....	3,469 66		
Water Powers	15,016 68		
Algonquin Provincial Park.....	1,121 50		
		68,700 58	
Miners' Licenses	24,035 60		83,774 38
Permits	945 00		
Recording Fees	27,291 26		
		52,271 86	
<i>Supplementary Revenue:</i>			
Acreage Tax	29,301 62		
Profit Tax	863,547 75		
Gas Tax	26,359 43		
		919,208 80	
WOODS AND FORESTS.			971,480 66
Bonus		679,304 17	
Timber Dues		795,004 08	
Ground Rent		87,263 93	
Transfer Fees		4,740 00	
Fire Protection		189,773 07	
			1,756,085 25
Provincial Assay Fees.....	722 35		
Casual Fees	976 00		
Cullers' Fees	80 00		
Forest Reserves Guides' Fees	130 00		
		1,908 35	
Algonquin Provincial Park.....	17,982 93		
Quetico Provincial Park.....	1 00		
		17,983 93	
Sale of Provincial Ore.....		1,384 53	
			21,276 81
REFUNDS.			
Forest Ranging.....		33,381 77	
Fire Ranging		1,930 15	
Surveys		1,161 70	
Algonquin Park Cleaning Right-of-Way.....		1,117 61	
Contingencies		246 43	
Colonization		207 57	
Agents' Salaries		155 80	
Insurance		59 15	
Mines and Mining		47 50	
Advertising.....		25 00	
Mining Recorders'.....		11 44	
Forest Reserves.....		4 75	
Mineral Display at Exhibitions.....		4 00	38,352 87
			2,964,161 76

D. GEO. ROSS,
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Appendix No. 5.

Statement of Receipts of the Department of Lands, Forests and Mines for the year ending
October 31st, 1918, which are considered as Special Funds.

Service.	\$ c.	\$ c.
<i>Clergy Lands.</i>		
Principal	149 44	
Interest	205 96	355 40
<i>Common School Lands.</i>		
Principal	4,142 81	
Interest	3,199 16	7,341 97
<i>Grammar School Lands.</i>		
Principal	180 00	
Interest	108 00	288 00
<i>University Lands.</i>		
Principal	1,031 88	
Interest	385 43	1,417 31
		<u>\$9,402 68</u>

D. GEO. ROSS,
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ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 6.

Statement of Disbursements of the Department of Lands, Forests and Mines, for the
year ending October 31st, 1918.

Service.	\$ - c.	\$ c.	\$ c.
AGENTS' SALARIES AND DISBURSEMENTS.			
<i>Land, \$18,202.13.</i>			
Anderson, T. V.	600 00		
Disbursements	33 50		
		633 50	
Arthurs, E.		200 00	
Baker, R. H.	350 00		
Disbursements	7 27		
		357 27	
Bolger, J. W.	900 00		
Disbursements	186 83		
		1,086 83	
Both, C.		200 00	
Brown, John	500 00		
Disbursements	16 37		
		516 37	
Burrows, W. A.	1,000 00		
Disbursements	289 95		
		1,289 95	
Cameron, W.	500 00		
Disbursements	24 50		
		524 50	
Campbell, Miss I. M.	500 00		
Disbursements	15 00		
		515 00	
Dempsay, S. J.	1,000 00		
Disbursements	55 00		
		1,055 00	
Dodds, T.	500 00		
Disbursements	11 00		
		511 00	
Douglass, W. J.		500 00	
Ellis, H. J.		500 00	
Freeborn, J. S.	500 00		
Disbursements	5 00		
		505 00	
Gibson, J. E.	683 32		
Disbursements	151 70		
		835 02	
Ginn, F. E.	841 00		
Disbursements	239 80		
		1,080 80	
Hales, W.		250 00	
Hollands, C. J.		300 00	
Jenkin, W.	500 00		
Disbursements	7 11		
		507 11	
McFayden, A.	500 00		
Disbursements	45 65		
		545 65	
MacLennan, J. K.		700 00	
Carried forward		12,613 00	

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		12,613 00	
AGENTS' SALARIES AND DISBURSEMENTS— <i>Continued.</i>			
<i>Land.—Concluded.</i>			
Noble, E.		300 00	
Parsons, W. J.	641 66		
Disbursements	159 40	801 06	
Phillion, J. A.	500 00		
Disbursements	19 32	519 32	
Prince, A.	500 00		
Disbursements	28 50	528 50	
Small, R.	500 00		
Disbursements	22 75	522 75	
Spry, W. L.	600 00		
Disbursements	290 25	890 25	
Teasdale, R. A.	500 00		
Disbursements	6 00	506 00	
Watt, F.		300 00	
Whybourne, W. E.	300 00		
Disbursements	3 75	303 75	
Wilson, A. N.	175 00		
Disbursements	7 50	182 50	
Woollings, J.	700 00		
Disbursements	35 00	735 00	
<i>Homestead Inspectors, \$14,978.75.</i>			
Barr, J.	1,200 00		
Disbursements	500 25	1,700 25	
Bastien, J. A.	900 00		
Disbursements	99 75	999 75	
Brown, J. B.	1,000 00		
Disbursements	314 41	1,314 41	
Burnes, C. W.	1,000 00		
Disbursements	134 39	1,134 39	
Cragg, W. V.	1,200 00		
Disbursements	230 92	1,430 92	
Dean, T.	800 00		
Disbursements	109 30	909 30	
Hughes, T.	1,000 00		
Disbursements	593 90	1,593 90	
Owens, H. B.	266 66		
Disbursements	136 35	403 01	
<i>Carried forward</i>		27,688 06	

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			27,688	06		
<i>AGENTS' SALARIES AND DISBURSEMENTS—Continued.</i>						
<i>Homestead Inspectors.—Concluded.</i>						
Quenneville, I.	300	00				
Disbursements	80	80				
			380	80		
Smith, D.	1,500	00				
Disbursements	376	87				
			1,876	87		
Watson, T. P.	1,200	00				
Disbursements	412	05				
			1,612	05		
Wigle, R. G.	1,200	00				
Disbursements	423	10				
			1,623	10		
<i>Timber, \$31,088.07.</i>						
Bremner, G.	1,800	00				
Disbursements	332	24				
			2,132	24		
Christie, W. P.	1,600	00				
Disbursements	276	68				
			1,876	68		
Hawkins, S. J.	1,550	00				
Disbursements	315	08				
			1,865	08		
Henderson, C.	2,000	00				
Webster, W. A., Assistant	505	00				
Disbursements	262	20				
			2,767	20		
Huckson, A. H.	1,616	67				
Disbursements	459	84				
			2,076	51		
Johnson, S. M.	133	00				
Disbursements	304	58				
			437	58		
MacDonald, S. C.	1,700	00				
Disbursements	135	53				
			1,835	53		
Margach, W.	1,600	00				
Legris, J., Assistant	1,600	00				
Cunningham, E. A., Stenographer	456	50				
Disbursements	639	43				
			4,295	93		
McDonald, H.	1,500	00				
Disbursements	178	83				
			1,678	83		
McDougall, J. T.	1,700	00				
Disbursements	515	86				
			2,215	86		
Oliver, J. A.	1,700	00				
Porter, M., Stenographer	70	95				
Campbell, M., Stenographer	486	53				
Disbursements	801	34				
			3,058	82		
Stevenson, A.	1,500	00				
Disbursements	338	95				
			1,838	95		
<i>Carried forward</i>			59,260	09		

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		59,260 09	
AGENTS' SALARIES AND DISBURSEMENTS.— <i>Concluded.</i>			
<i>Timber.—Concluded.</i>			
Watts, G.	1,500 00		
McDonald, A., Assistant	1,500 00		
Disbursements	249 29	3,249 29	
Wood, W. G. A.	1,300 00		
Disbursements	459 57	1,759 57	
<i>Miscellaneous, \$2,772.90.</i>			
Bilton, G., Caretaker, Islands in North and South Crosby		31 25	
Butler, E. W. D., Valuating Water Lots, Port Arthur		500 00	
Guthrie, W., Caretaker, Islands in Devil's Lake ..		25 00	
Jamieson, W. H., Caretaker, Islands in Dog and Laboria Lakes		50 00	
Long, H. E., Building and Equipment, South Porcupine		900 00	
McArthur, T. A., Inspector of Agencies	748 00		
Disbursements	518 65	1,266 65	
OTTAWA AGENCY.			67,041 85
Darby, E. J., Agent		1,500 00	
Larose, S. C., Clerk		1,000 00	
Rent	700 00		
Disbursements	107 95	807 95	
FOREST RANGING, \$125,474.84.			3,307 95
Acheson, I. M.		1,613 50	
Allanson, J. A.		515 00	
Allen, R. A.		1,067 00	
Alk, J. C.		106 00	
Arnell, Wm.		1,534 00	
Bailey, A.		940 00	
Baldson, Geo.		95 00	
Barrett, Thos.		764 50	
Bates, R.		735 00	
Benning, J.		33 00	
Blastorah, B.		320 00	
Boice, R.		112 00	
Boiley, H.		124 00	
Braman, C.		103 00	
Bremner, G. A. Disbursements		74 38	
Bromley, Ed.		895 50	
Bromley, T. A.		1,185 00	
Brooks, J. W.		895 00	
Brown, J. A.		1,287 00	
Buisson, Wm.		690 00	
Carroll, P.		297 00	
Castonguay, A. C.		687 50	
Charlebois, E.		225 00	
Chenier, D. A.		1,721 50	
Christie, W. P. Disbursements		5 20	
Clairmont, E.		715 00	
<i>Carried forward</i>		16,740 08	70,349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		16,740 08	70 349 80
<i>FOREST RANGING.—Continued.</i>			
Clark, W. R.		709 50	
Cloud, Wm.		343 00	
Comer, B. F.		630 00	
Connelly, D.		745 00	
Corrigan, R. T.		1,661 00	
Coyne, P.		775 00	
Cross, R. J.		725 00	
Cullen, M.		200 00	
Curly, Miss V. Stenographer		194 99	
Dawkins, J. J.		962 50	
Dennie, F. J.		891 00	
Didier, H.		995 00	
Dillon, J. R.		1,235 00	
Doxsee, J. E.		623 00	
Dulmage, J.		15 00	
Dunn, J. F.		825 00	
Durrell, Wm.		1,699 00	
Duval, C. A.		830 50	
Elliott, Ed.		21 00	
Fairbairn, N. H.		555 50	
Ferguson, A. E.		980 00	
Fisher, Geo.		1,116 50	
Fletcher, N.		885 50	
Fraser, W. A.		711 00	
Fraser, R. T.		477 00	
Graham, Chas.		156 00	
Hagan, E. G.		951 50	
Hale, John		460 00	
Hamburg, M. A.		52 00	
Hamilton, Fred.		702 00	
Hand, Thos.		20 00	
Harris, C.		260 00	
Hart, I.		699 00	
Hartley, C.		1,435 50	
Harvey, A.		72 00	
Hawkins, S. J.		112 80	
Henderson, A. E.		637 00	
Henderson, L. E.		1,595 00	
Henderson, A. E.		709 50	
Henderson, Chas. Disbursements		866 88	
Hey, Ben.		795 00	
Hoff, M.		918 50	
Hogan, J.		560 00	
Hogarth, J.		925 00	
Huckson, E.		156 00	
Huckson, A. H. Disbursements		827 41	
Hurdman, W. H.		715 00	
Hutton, John		1,523 50	
Jamieson, J.		645 00	
Jeroux, A.		132 00	
Johnson, Wm.		28 00	
Kelley, T.		730 50	
Kernahan, G. A.		645 00	
Kitchen, James		52 00	
Lagenness, Leo.		72 00	
Latour, F.		104 00	
Lee, J. B.		990 00	
Legris, J. Disbursements		153 30	
Leroy, L. H.		695 00	
<i>Carried forward</i>		54,942 46	70 349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		54,942 46	70 349 80
<i>FOREST RANGING.—Continued.</i>			
Lilevre, J.		93 00	
Linklater, Geo.		214 50	
Little, T.		630 00	
Lowe, W. C.		565 00	
MacDonald, S. C. Disbursements		50	
Macdonell, R. D.		790 00	
Manice, Wm.		1,435 50	
Margach, Wm. Disbursements		1,316 85	
Margach, J. A.		1,595 00	
Menzies, Alex.		1,870 00	
Milway, J. H.		1,056 00	
Molyneaux, Geo.		863 50	
Moody, L. A.		630 00	
Mooney, L.	1,967 00		
Disbursements	168 14		
		2,135 14	
Moran, A.		1,870 00	
Morel, A.		134 50	
Murray, Wm.		2,216 50	
Murray, Thos.	250 00		
Disbursements	25 60		
		275 60	
McAulay, W. D.		805 00	
McCallum, A.		200 00	
McCaw, J. E.		775 00	
McCaw, J. G.	1,864 50		
Disbursements	43 30		
		1,907 80	
McDonald, J. D.		1,864 50	
McDonald, Thos.		614 50	
McDonald, F.		56 00	
McDonald, Hector Disbursements		33 75	
McDonnell, J. R.		880 00	
McDougall, J. T. Disbursements		206 35	
McFarlane, J. D.		561 00	
McGillivray, D. D.		510 00	
McGregor, W. H.		216 00	
McGuire, C.		279 00	
McIvor, J. A.		1,170 00	
McKendry, W. B.		830 00	
McLaughlin, John		647 00	
McLay, A.		690 00	
McLean, John		1,941 50	
McLeod, E. H. Disbursements		14 72	
McNabb, A.		870 00	
McPherson, J. S.		1,798 50	
Nault, James		1,609 00	
Nephew, D.		150 00	
Nevison, W. H.		778 25	
Niblett, James		1,413 50	
Ogden, L. M.		570 00	
Oldschamp, R.		165 00	
Oliver, J. A. Disbursements		575 77	
Pigott, J. A.		1,480 00	
Poulin, C.		88 00	
Pritchard, Fred		410 00	
Regan, John		484 00	
Reid, J. P.		1,035 00	
Richardson, C. R.		645 00	
<i>Carried forward</i>		98,858 19	70 349 80

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		98,858 19	70 349 80
FOREST RANGING.—Concluded.			
Ridley, R.		1,575 75	
Ritchie, J. F.		925 00	
Ross, S.		1,498 50	
Ryan, James		1,147 00	
Schrieber, C. C.		539 00	
Shaw, Alfred	605 00		
Disbursements	15 00		
		620 00	
Shaw, D.		435 00	
Sharp, James		865 00	
Short, J.		500 00	
Simpson, Wm.		1,645 00	
Sissons, H. P.		320 00	
Smith, J. D. C.		745 00	
Spafford, Thos.		200 00	
Spavin, J.		1,130 00	
Spence, D.		1,721 50	
Stein, Paul		1,680 00	
Stevenson, A.		110 90	
Stewart, D.	600 00		
Disbursements	7 00		
		607 00	
Thorpe, Thos.	987 00		
Disbursements	14 45		
		1,001 45	
Trowse, A. E.		599 50	
Urquhart, A.		990 00	
Vanderburg, N.		902 00	
Vincent, H. T.		1,853 50	
Warri, F.		52 00	
Watts, Fred		156 00	
Watts, J. J.		25 00	
Watts, Geo.		114 95	
Whelan, P. J.	1,870 00		
Disbursements	137 90		
		2,007 90	
Whelan, P. M.		55 00	
Williams, P.		126 00	
Wilson, D.		920 00	
Wilson, Alex.		475 00	
Wood, W. G. A.		62 45	
Wylie, B.		11 00	
Youmans, D.		55 25	
Young, R. J.		745 00	
Yuill, John		200 00	
			125,474 84
FIRE RANGING.			
Abbott, Wm.		378 50	
Abraham, M.		214 50	
Adams, A.		433 75	
Agnew, Wm.		173 25	
Alt, John		222 75	
Allen, R. A.	845 00		
Disbursements	348 76		
		1,193 76	
Allen, Wm.		418 00	
Ambridge, Wm.		60 00	
American Tent and Awning Co.,	Supplies	240 00	
Anderson, John		200 75	
<i>Carried forward</i>		3,535 26	195,824 64

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>			3,535	26	195,824	64
<i>FIRE RANGING.—Continued.</i>						
Anderson, James			291	50		
Anderson, Robert			393	25		
Anger, T.			321	75		
Archambault, G.			409	75		
Arnott, T. W.			167	75		
Atkison, A. C.			286	00		
Aubee, T.			390	50		
Aymor, A. J.			302	50		
Babin, J.			225	00		
Baker, Wm.			390	50		
Baldwin, Steve			379	50		
Baldwin, Wm.			379	50		
Bandin, J.			16	50		
Banks, E.			230	25		
Barratt, J.			250	75		
Barrie, T.			420	75		
Barry, C.			404	25		
Bartlett, S.			192	50		
Barton, J.			393	25		
Bartrand, Wm.			341	00		
Baskin, L.			327	25		
Basso, A. N.			77	00		
Bates, R.			280	50		
Bauman, Theo.			341	00		
Beatty, W. A.			371	25		
Beatty, H.			7	00		
Beaudry, J.			354	75		
Beaudry, M.			382	25		
Beauvis, P.			379	50		
Beauvis, J.			379	50		
Bedard, J.			379	50		
Bedford, H.			397	75		
Bedford, O.			39	00		
Begin, A.			376	75		
Belcher, E. D.			400	50		
Bell, W.			55	00		
Bell, J.			376	75		
Bellefull, O.			393	25		
Beleveau, F.			342	75		
Belton, W. J.	387	75				
Disbursements	4	40				
Benard, D.			392	15		
Benson, M.			108	50		
Bergeron, Alf.			41	25		
Bernoche, G.			360	25		
Bernier, C.			346	50		
Bernier, Z.			379	50		
Bird, John			338	25		
Bisson, Art.			368	50		
Blair, H. L.			417	00		
Blanchette, H.			24	75		
Blaski, F.			335	50		
Bliss, L. E.	3,000	00	396	00		
Disbursements	1,632	21				
Blonaim, E.			4,632	21		
Blondin, A.			38	50		
Boiley, H.			313	50		
Bois, L.			514	25		
			393	25		
<i>Carried forward</i>			24,783	12	195,824	64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		24,783 12	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Boissoneault, J.		398 75	
Boivin, J.		403 25	
Boldt, A.		382 25	
Bonathan, Wm.		415 25	
Bonsteel, H.		551 25	
Bookhout, H.		308 00	
Boucher, C.		453 75	
Boucher, S.		154 00	
Boucher, J.		184 25	
Bourke, P.		382 50	
Bourassa, E.		117 00	
Bowes, John		401 50	
Bowers, Geo.		376 75	
Bowland, J. J.	920 00		
Disbursements	1,121 26		
		2,041 26	
Bowles, J.		374 00	
Boyce, B.		382 25	
Boyes, N.		409 75	
Boyd, John		155 00	
Boyd, J.		302 50	
Bozalie, E.		101 75	
Brant, H.		272 25	
Brear, Geo.		393 25	
Bremer, C. E.		401 50	
Brennan, G.		368 50	
Brennan, R. L.		401 50	
Brensten, H.		154 00	
Bresenham, J.		349 25	
Brock, W. R., & Co.	Supplies		
Bromley, E. H.	573 25	2,313 86	
Disbursements	177 05		
		750 30	
Bromley, J. C.		338 25	
Brooke, A. T.		178 75	
Brooks, Wesley		327 25	
Brown, E.		137 50	
Brown, T. E.		429 00	
Brown, J. F.		405 00	
Brown, A.		382 25	
Brown, August		368 50	
Brown, W.		431 75	
Brown, Wm.		77 00	
Brown, John		371 25	
Brown, H.		291 50	
Brown, W. C.		244 75	
Brum, A. W.	840 00		
Disbursements	722 10		
		1,562 10	
Bryant, W.		478 50	
Buckingham, J. P.		387 75	
Bull, W.		370 25	
Bull, W. H.		407 00	
Bulmer, A.		365 75	
Bunting, H. T.		379 50	
Burns, F.		359 25	
Burns, J.		88 00	
Butler, W. J.		170 50	
Cahoun, John		137 50	
Calder, Ed.		228 25	
<i>Carried forward</i>		47,399 64	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		47,399 64	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Cameron, N.		225 50	
Cameron, Jos.		247 50	
Cameron, Wm.		299 75	
Cameron, Archie		360 25	
Cameron, M. H.		393 25	
Cameron, J. K.	628 00		
Disbursements	14 35		
		642 35	
Campbell, S.		101 75	
Campbell, J.		313 50	
Campbell, J. R.		319 00	
Campbell, D.		433 75	
Campbell, W.		584 00	
Campbell, R.		406 00	
Campbell, A.		379 50	
Campbell, T. J.		305 25	
Campbell, K. W.		371 25	
Campbell, Thos.		415 25	
Campbell, Wesley		407 00	
Canadian Northern Express Co. Express		6 20	
Canadian Express Co. Express		4 12	
Canadian Pacific Railway Co. Freight charges		8 22	
Canadian Fairbanks-Morse Co. Equipment		4,108 54	
Caney, Thos.		85 25	
Canning, J.		387 75	
Canora, Jos.		316 25	
Carew, John, Lumber Co.		112 50	
Carino, F.		3 50	
Caron, F.		126 50	
Carlton, T.		381 25	
Carpenter, G. G.		382 25	
Carrier, E.		134 75	
Caswell, R.		379 50	
Caswell, S.		129 25	
Caswell, M.		258 50	
Cates, Jos.		382 25	
Cave, J. E.		19 25	
Chaffey, Wm.		390 50	
Chamberlain, H.		371 25	
Chambers, Thos.		401 50	
Chapman, John		280 50	
Chapman, C. N.		286 00	
Chappish, J.		280 50	
Charlebois, E.		38 50	
Charron, J.		470 25	
Chartrand, M.		123 75	
Chase, J. F.		396 00	
Chaundant, H.		121 00	
Chautal, Art.		5 50	
Chief, T.		173 25	
Chief, N.		159 50	
Chippier, M.		401 50	
Christianson, J.		23 50	
Clark, W. R.	815 00		
Disbursements	919 06		
		1,734 06	
Cleary, J. F.		88 25	
Clegg, R.		225 50	
Clegg, F.		141 00	
<i>Carried forward</i>		66,942 13	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		66,942 13	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Clergue, D.		154 00	
Cochrane, H.	396 00		
Disbursements	2 40		
Codere, H.		398 40	
Coghlan, T. E.		401 50	
Coghlan, Thos.		370 25	
Coghlan, J. S.		401 50	
Coghlan, J. S.		368 50	
Coleman, E. J.		403 25	
Conklin, Wm.		393 25	
Conroy, Ed.		324 50	
Conway, R.		401 50	
Conway, Thos.		374 00	
Conway, H.		379 50	
Cook, Geo.		4 00	
Cook, Wm.		379 50	
Cooney, Thos.		385 00	
Corps, A. C.		352 00	
Coshette, T.		44 00	
Cotte, H.		359 25	
Cottenham, Wm.		387 75	
Couorette, J.		418 00	
Cowan, J.		352 00	
Cox, Jos.		396 00	
Coyne, P.	268 00		
Disbursements	52 20		
Craig, John		320 20	
Crawford, John		385 00	
Cross, C. C.		706 50	
Cross, C. C.		173 25	
Cryer, P.		8 25	
Cuddy, J.		390 50	
Culbert, D. S.		367 50	
Culhane, Dan.		239 25	
Culhane, A.		299 75	
Culhane, D.		390 50	
Cullen, G. B.		211 75	
Cummer, W. T.		156 75	
Cummins, Thos.	308 00		
Disbursements	19 40		
Cummins, Frank		327 40	
Currie, T. A. G.		286 00	
Curtin, Dave		286 00	
Curtis, John		396 00	
Curtis, John		354 75	
Dagg, A.		173 25	
Dalman, J.		327 25	
Dambremont, F.		220 00	
Dancer, Geo.		123 75	
Dane, Alf.		396 00	
Darby, Wm.	915 00		
Disbursements	1,409 86		
Davidson, Ira		2,324 86	
Davidson, John		379 50	
Davies, A.		414 25	
Davis, Thos.		44 00	
Davis, Thos.		376 75	
Dawkins, J. J.	600 00		
Disbursements	130 78		
		730 78	
<i>Carried forward</i>		85,199 52	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		85,199 52	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Dawson, Geo.		115 50	
DeLabarre, H.		368 00	
Dennie, F. J.	790 00		
Disbursements	342 14		
		1,132 14	
Dennison, H. J.		401 50	
Deschamp, F.		363 00	
Deschamp, J.		44 00	
Deschamp, P.		55 00	
Desjordina, W.		46 50	
Derouard, M.		396 00	
Derouin, James		379 50	
Derouin, A.		354 75	
Dery, Jos.		349 25	
Deschine, J.		332 75	
Desellier, P.		148 50	
Dewett, John		68 75	
Dickson, W. D.		401 50	
Dickson, J.		280 25	
Dixson, Geo.		101 75	
Dobie, T.		418 00	
Dodds, A.		341 00	
Dodge, Thos.		404 25	
Dominion Express Co. Express		18 18	
Domoulin, D.		73 50	
Domoulin, P.		33 00	
Donaldson, John		352 00	
Donaldson, C.		382 25	
Donis, P.		376 75	
Douchine, D.		231 00	
Douchine, S.		338 25	
Dougherty, Chas.		286 00	
Douglas, J. R.		203 75	
Douglas, D. B.		253 00	
Douglas, Thos.		371 25	
Dowadal, D.		365 75	
Dowd, H. L.		393 25	
Downey, Geo.		206 75	
Dowsett, R. E.		631 50	
Dubreuiel, A.		376 75	
Dubrois, Wm.		343 75	
Ducharme, D.		360 25	
Dufoe, B.		210 50	
Dufresne, D.		233 75	
Duke, D.		348 25	
Duma, Alex.		385 00	
Dumont, A.		167 75	
Dumont, O.		374 00	
Dumont, P.		24 75	
Dunbar, James		593 25	
Duncan, R.		376 75	
Dunn, J.		371 25	
Dunning, J. R.		184 25	
Dupine, Hy.		420 75	
Dupuis, O.		393 25	
Dupuis, Ed.		187 00	
Duquette, Chas.		390 50	
Duquette, H.		379 50	
Duval, C. A.	1,284 00		
Disbursements	1,461 31		
		2,745 31	
<i>Carried forward</i>		104,884 15	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		104,884 15	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Edwards, W. C.		288 00	
Edwick, C. G.		390 50	
Elleston, R.		237 00	
Elliotte, C. H.		376 75	
Elliotte, J.		140 25	
Elliss, E. C.		433 13	
Ellsworth, C. B.		387 75	
Emery, J.		386 75	
Emes, Hugh		393 25	
Ennis, S.		324 50	
Espanoil, A.		294 25	
Evans, W. J.	980 00		
Disbursements	1,024 19		
		2,004 19	
Everett, L.		299 75	
Fairbairn, N. H.		343 75	
Falshaw, R.		404 25	
Farr, W. F.		224 00	
Faudette, J.		33 00	
Favelle, T. W.		96 25	
Favreau, Geo.		225 50	
Fecto, Geo.		415 25	
Ferland, Geo.		402 50	
Ferguson, A.		406 00	
Ferguson, E. A.		99 00	
Ferguson, T. H.	584 00		
Disbursements	3 69		
		587 69	
Ferguson, F.		390 50	
Ferguson, J.		403 25	
Ferris, R.		80 00	
Field, Wm.		308 00	
Filion, D.		291 50	
Filliatrault, J.		384 00	
Findley, Jas.		434 50	
Finlayson, J. L.		19 25	
Finlayson, J.		305 25	
Finlayson, J. H.		431 75	
Finlayson, D.		261 25	
Finn, J.		220 00	
Firby, L. C.		216 00	
Fisher, Geo.	765 00		
Disbursements	594 39		
		1,359 39	
Fitzgerald, Jas.		393 25	
Flaherty, John		387 75	
Flanagan, W. J.		108 00	
Fleming, F. L.	576 00		
Disbursements	82 05		
		658 05	
Fletcher, N. B.	620 00		
Disbursements	47 70		
		667 70	
Fletcher, A.		162 00	
Fleurie, Andy		354 75	
Flynn, Pat.		396 00	
Forman, A.		396 00	
Forster, A. T.		152 25	
<i>Carried forward</i>		122,857 80	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		122,857 80	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Fortin, J. T.		338 25	
Foster, F.		141 00	
Foster, R.		371 25	
Foucault, A.		363 00	
Fournier, J.		233 75	
Francois, J. S.		253 00	
Franklin, John		52 25	
Fraser, A.		376 75	
Fraser, W. A.		431 75	
Fraser, Chas.		63 25	
Frecette, B.		393 25	
Frenette, Leo		60 50	
French, Lorn		379 50	
Frith, A.		313 50	
Furlong, J.		401 50	
Gagne, F.	825 00		
Disbursements	688 94		
		1,513 94	
Gagnon, F.		192 50	
Gagnon, F.		297 00	
Gagnon, Alex.		396 00	
Gagnon, N.		401 50	
Gamble, J. H.		7 50	
Gamble, Wm.		134 75	
Gardner, S. H.		370 25	
Gartshore, M.		393 25	
Gaudaette, J.		318 00	
Gault, J.		382 25	
Gault, R.		382 25	
Gay, M. W.		13 80	
Gemmill, John	960 00		
Disbursements	527 06		
		1,487 06	
Genereux, S.		376 75	
Gerrard, T.		302 50	
Gervais, F. H.		382 25	
Gervais, F.		382 25	
Gervais, F.		386 75	
Gervais, Jos.		231 00	
Gibbons, O.		376 50	
Gibson, Ed.		393 25	
Gideon, Jos.		363 00	
Gideon, C.		222 75	
Giles, Chas.		7 00	
Godward, E.		380 25	
Gonge, H.		49 50	
Good, W. H.		104 50	
Good, J. R., Advertising Co.	Supplies	175 00	
Gordon, Alfred		390 50	
Gorman, D.		351 00	
Gosselin, Fred.		126 50	
Graham, C.		335 50	
Graham, J.		374 00	
Grand Trunk Railway Co.	Freight	1 06	
Granier, J.		314 50	
Grasser, G.		431 75	
Grawberger, Thos.		393 25	
Gray, Peter		401 50	
Great North Western Telegraph Co.		13 89	
<i>Carried forward</i>		140,587 05	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		140,587 05	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Green, W. T.		85 25	
Green, Malcolm		82 50	
Grills, S.		355 75	
Groome, L.		349 25	
Grotten, C. A.		140 00	
Groulx, A.		396 00	
Groulx, J.		445 50	
Groulx, A.		445 50	
Groulx, P.		396 00	
Groulx, Chas.		352 00	
Groutte, Dan.		49 50	
Grovers, Jno.		341 00	
Guess, Jos.		346 50	
Guetr, S.		134 75	
Gunderson, A.		376 75	
Gunter, R. H.		396 00	
Gunter, J.		376 75	
Guthrie, Wm.		396 00	
Guy, Fred.		66 00	
Hackenbroich, C.		302 50	
Hagen, C.		393 25	
Hagarty, J.		459 00	
Haggart, L.		94 50	
Haley, Ed.		407 00	
Hall, David		385 00	
Hall, Wm.		371 25	
Hall, John		426 25	
Hall, Thos.		170 50	
Hall, Wesley		387 75	
Halliday, Wm.		412 50	
Hamilton, J. W.		374 00	
Hamilton, Fred.	815 00		
Disbursements	539 57		
		1,354 57	
Hamilton, J.		379 50	
Hammond, W.		408 00	
Hamon, F.		434 50	
Hanbridge, Wm.		276 00	
Hand, Thos.	885 00		
Disbursements	530 47		
		1,415 47	
Hanrahan, D.	515 00		
Disbursements	519 85		
		1,034 85	
Hanson, A.		382 25	
Harkley, Jno.		390 50	
Harney, B.		371 00	
Harney, S.		371 00	
Harper, Wm.		393 25	
Harris, F.		55 00	
Harrison, Geo.		242 00	
Hartford, Wm.		29 20	
Harvie, A.		374 00	
Haskins, W.		407 00	
Hass, Geo.		396 00	
Hastings, J.		390 50	
Hawley, P.		368 50	
Hayes, C.		297 00	
<i>Carried forward</i>		160 071 64	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Carried forward</i>		160,071 64	195,824 64
FIRE RANGING.—Continued.			
Hayes, T.		176 00	
Hazard, Geo.		385 00	
Hazard, S. W.		236 50	
Head, W. J.		82 50	
Healy, H.		19 25	
Hebert, J. A.		276 75	
Hefferty, D.		5 50	
Heltman, R.		375 75	
Henderson, John		434 50	
Heney, Jos.		365 75	
Henry, M.		9 20	
Herron, A.		55 00	
Hey, Ben.	845 00		
Disbursements	346 80		
		1,191 80	
Hickey, J. L.	855 00		
Disbursements	644 90		
		1,499 90	
Higgins, John		352 00	
Hill, Chas.		349 25	
Hindson, C. E.	Disbursements	20 60	
Hines, E.		210 00	
Hoadley, John		341 00	
Hogan, C.		85 25	
Hogan, J. C.		310 75	
Hogan, P.		409 75	
Hogan, D.		310 75	
Holley, J.		162 25	
Hollingshead, A.		401 50	
Holm, O.		1 50	
Holmes, W. F.		242 00	
Holmes, J.		217 25	
Holt, Wm.		387 75	
Holst, A.		505 75	
Honeyford, W.		356 00	
Horn, A. G.		371 25	
Hornick, Geo.		429 00	
Horsman, H.		371 25	
Holte, J. D.		382 25	
Hubbell, E. S.		103 40	
Hubart, A. R.		288 00	
Hudson's Bay Co.		13 75	
Hume, O. B.		376 75	
Hunter, Wm.		401 50	
Hunter, E.		302 50	
Hunter, L. H.		343 75	
Hurdman, W. H.	615 00		
Disbursements	61 95		
		676 95	
Indian, F.		198 00	
Ireland, G. E.		328 25	
Irish, Wm.		475 50	
Irwin, T.		140 25	
Isaac, M.		141 00	
Isbister, J. A.		390 50	
Jacob, M.		217 25	
James, G.		390 50	
Jarvis, J.		16 50	
Jeneroux, N.		403 25	
<i>Carried forward</i>		176,609 74	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		176,609 74	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Jenkins, S.		1,470 00	
Jennings, Fred.		121 00	
Jewell, F.		379 50	
Jewell, E.		402 50	
Jocko, P.		407 00	
Johnson, Wm.		440 00	
Johnston, F. F.		415 25	
Johnston, F. C.		357 50	
Johnston, John		376 75	
Johnston, J. E.		255 75	
Johnston, W. A.		134 75	
Jolicour, J. P.		55 00	
Jones, T.		406 00	
Jones, Chas.		390 50	
Jones, W. T.		387 75	
Jones, W. M.		294 25	
Julian Sale Leather Goods Co.		14 50	
Keating, W.		404 25	
Keeley, C. A.		382 25	
Kellington, W. J.		272 25	
Kelly, R.		18 00	
Kelly, T.		376 75	
Kelly, John		390 50	
Kelly, Geo.		253 00	
Kelly, J.		79 75	
Kennedy, Robt.		376 75	
Kerby, John		379 50	
Kerby, John		264 00	
Kewais, J.		365 75	
Kickley, Wm.		393 25	
Kielty, Geo.		376 75	
Kilby, T.		368 50	
King, R.		393 25	
King's Printer	Supplies	837 22	
Kingston, Thos. J.		379 50	
Kingston, Thos. H.		352 00	
Kirton, Wm.		390 50	
Kirtin, N.		516 00	
Kitchen, J.		341 00	
Kitchen, J.		393 25	
Kitcheban, J.		225 50	
Knott, J.		348 25	
Knox, D.		451 50	
Kowaskie, Chas.		41 00	
Krock, A.		390 50	
Labby, F.		55 00	
Labby, J.		85 25	
Labelle, D.		195 25	
Labelle, S.		382 25	
Labine, E.		250 25	
Labine, J.		341 00	
LaBrash, James		385 00	
Labree, P.		140 25	
Lacell, L.		379 50	
Lecleir, P.		192 00	
Lacleir, R.		192 00	
Lacroix, J.		204 00	
Lafond, J.		140 25	
Lafontain, J. D.		401 50	
<i>Carried forward</i>		196,021 96	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		196,021 96	195,824 64
<i>FIRE RANGING.—Continued.</i>			
LaGrow, Geo.		330 00	
Laidlaw, H.		313 50	
Lamey, Jos.		250 25	
Lamontague, P.		165 00	
Lamonrieux, A.		360 25	
Lance, F.		387 75	
Langford, T.		376 75	
Lanktree, J.		437 25	
Lapland, P.		379 50	
Laplante, John		321 75	
Lapierre, P.		143 00	
Lapuline, J. J.		378 25	
Larwell, O.		401 50	
Laroque, J.		220 00	
Larson, C. G.		211 75	
Lascelle, Ed.		363 00	
Latour, L.		188 50	
Laturski, G.		250 25	
Laundry, P.		365 75	
Laundry, J.		360 25	
Laundry, D.	652 75		
Disbursements	285 40		
Lavalley, W.		938 15	
Lavigne, A.		337 00	
Lavesque, J.		363 00	
Lawrance, S.		398 75	
Lawson, Jas.		420 75	
Leach, R. H.		385 00	
Leamy, J.		319 00	
Leberge, J.	679 00	85 25	
Disbursements	368 45		
Leblance, O.	588 00	1,047 45	
Disbursements	166 52		
Lebianc, Wm.		754 52	
Leblanc, Walter		341 00	
Leblanc, J.		379 50	
LeClair, H.		363 00	
Lee, J. B.	795 00	330 00	
Disbursements	143 21		
Lee, C.		938 21	
Lee, T. F.		119 90	
Lefive, F.		269 50	
Legarie, A.		393 25	
Legris, J.	Disbursement	57 75	
Legris, H. M.		2,344 00	
Legris, Thos.		407 00	
Lepenskie, Paul		407 00	
Leroy, Wm.		393 25	
Leroy, L.	825 00	321 00	
Disbursements	563 56		
Lerwill, R.		1,388 56	
Letourneau, E.		434 50	
Lewis, W. H.	Searches	294 25	
Liddicott, T.		26 05	
		17 50	
<i>Carried forward</i>		216,500 30	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		216,500 30	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Lidstone, J.		393 25	
Lipsett, Wm.		211 75	
Livingstone, J.		5 50	
Loney, John		401 50	
Lorimer, Jos.		55 00	
Loughlin, John		324 50	
Lovering, J. E.		379 50	
Ludgate, John		357 50	
Lumb, John		387 75	
Luty, John		129 25	
Lyons, R. B.		363 00	
Lyons, H.		343 75	
MacCrindle, I.		349 02	
Machimitay, J.		203 50	
MacLeod, R.		280 50	
MacMillan, D. H.		5 50	
Madon, J. B.		343 75	
Maloy, T.		420 75	
Malowney, W. H.		376 75	
Mann, J.		367 00	
Mann, R. A.	280 00		
Disbursements	127 75		
		407 75	
Manawasin, P.		385 00	
Manioque, M.		396 00	
Marceau, P.		379 50	
Marchand, L.		291 50	
Martin, E.		253 00	
Martin, R.		378 25	
Martin, S.		378 25	
Martin, T.		387 75	
Mason, Geo.		341 00	
Matchener, Wm.		324 50	
Matheson, R.		379 50	
Matt, A.		12 00	
May, H.	830 00		
Disbursements	1,661 65		
		2,491 65	
Meagher, Geo.		397 75	
Mebes, A.		374 00	
Menard, E.		85 25	
Menard, H.		393 25	
Merchant, John		192 50	
Merkley, J. C.		41 00	
Michie, A.		379 50	
Micholson, J.		189 75	
Middlebrook, J. N.		393 25	
Miller, James		48 85	
Milway, J. H.	957 00		
Disbursements	1,549 39		
		2,506 39	
Misservier, T.		379 50	
Mitchell, P.		418 00	
Moffatt, Jos.		393 25	
Moir, Alex.		382 25	
Molyneaux, Geo.		400 00	
Mongose, A.		250 25	
Montgomery, R.		217 00	
Montgomery, S.		30 25	
<i>Carried forward</i>		236,476 86	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		236,476 86	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Montreuil, E.		360 25	
Montreuil, J. J.		365 75	
Montreuil, L.		379 50	
Moody, H. C.		275 00	
Moore, J. V.		434 50	
Moore, P.		74 25	
Moore, A.		196 25	
Moore, W.		337 00	
Morgan, Geo.	580 00		
Disbursements	93 00		
		673 00	
Morin, J.		376 75	
Morin, Jos.		327 25	
Morin, J. E.		390 50	
Morin, D.		129 25	
Morin, L.		151 25	
Mosseau, T.		242 00	
Mosseau, G.		115 50	
Mullette, S.		346 50	
Mullin, D. R.		382 25	
Mullin, A. E.		63 00	
Mullin, J.		6 00	
Muggaberry, T.		148 50	
Munroe, Wm.		382 25	
Munson, J.		22 50	
Murray, Thos.		434 50	
Musquatish, H.		387 75	
McAdam, Jas.		429 00	
McAra, H.		132 00	
McAulay, W. D.	75 00		
Disbursements	16 75		
		91 75	
McBain, R.		393 25	
McCall, H. E.		387 75	
McCarthy, J.		368 50	
McCaw, Wesley	576 00		
Disbursements	298 51		
		874 51	
McCaw, M.		187 00	
McClure, Wm.		393 25	
McCool, F.		308 00	
McCormick, T.		418 00	
McCoy, C. L.		434 50	
McCready, M.		393 50	
McCulloch, T.		332 75	
McCurrah, J.		41 25	
McDonald, A. J.	1,800 63		
Disbursements	491 00		
		2,291 63	
McDonald, H. F.		418 00	
McDonald, J. R.		415 25	
McDonald, T.		619 00	
McDonald, D. R.		378 25	
McDonald, Wm.		63 25	
McDonald, John		379 50	
McDonald, Wm.		370 25	
McDonald, M.		209 00	
McDonald, Howard		376 75	
<i>Carried forward</i>		254,184 00	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		254,184 00	195,824 64
<i>FIRE RANGING.—Continued.</i>			
McDonald, Neil		225 50	
McDonell, L. P.		376 75	
McDougall, C.	568 00		
Disbursements	4 80		
		572 80	
McFarland, J.		379 50	
McFarlane, Wm.		376 75	
McGarvey, P.		398 75	
McGhee, Chas.		387 75	
McGown, T.	895 00		
Disbursements	1,375 57		
		2,270 57	
McGregor, W. H.	865 00		
Disbursements	630 83		
		1,495.83	
McGregor, J. A.		382 25	
McKechnie, J. A.	970 00		
Disbursements	2,782 54		
		3,752 54	
McKendry, W. B.		379 50	
McKee, T.		379 50	
McKee, T. E.		379 50	
McKenna, P.		310 75	
McKenzie, J.		393 25	
McKenzie, R.		363 00	
McKibbon, J. W.		382 50	
McKinley, J. W.		595 00	
McKinley, A.		299 75	
McKinnon, Thos.		379 50	
McKnight, H.		85 25	
McLaren, J.		412 50	
McLean, C. O.	716 00		
Disbursements	48 55		
		764 55	
McLean, Jas.		444 50	
McLean, Donald		18 00	
McLellan, A.		126 50	
McLellan, B.		341 00	
McLeod, B.		362 00	
McLeod, P.		362 00	
McLeod, J.		319 00	
McLeod, J.		568 00	
McMahon, A.		407 00	
McNally, B.		631 50	
McNee, E.		389 50	
McNee, Geo.		389 50	
McNeill, J. A.		379 50	
McPhail, L. L.		126 50	
McPhee and Gardiner		6 00	
McPherson, J.		49 50	
McQuan, C. R.		310 75	
McSorley, W. J.		222 75	
Nadeau, G.		270 00	
Nairn, A. T.		85 25	
Neegan, J.		121 00	
Neep, P.		382 25	
Neill, J.		437 25	
Nelson, A.		22 50	
Nelson, Nels		412 50	
<i>Carried forward</i>		277,111 79	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		277,111 79	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Nevison, W. H. ....Disbursements..	608 00		
Disbursements	10 50		
Newman, E.		618 50	
Newman, P.		517 00	
Nicol, Alf.		354 75	
Nicholas, Wm.		531 50	
Nicholson, W.		379 50	
Niddery, R.		134 75	
Noel, A.		242 00	
Nolan, Chas.		213 75	
Norton, W. A.		365 00	
Norris, R.		397 75	
O'Bain, N.		63 25	
O'Brian, D.		178 75	
O'Brien, P.		376 75	
O'Connor, W.		412 50	
Odfeck, J.		371 25	
O'Donnell, J.		401 50	
O Grady, M.		376 75	
O'Grady, E. N.		390 50	
O'Litt, A.		327 25	
O'Neil, F.		145 00	
Oulette, A.		375 75	
Ouellette, A.		222 75	
Packham, C. J.		374 00	
Page, Fred		379 50	
Paquette, John		371 25	
Paquette, Paul		387 75	
Parent, J.		349 25	
Parker, L. H.		385 75	
Parker, A.		346 50	
Parker, C.		404 25	
Parker, S.		195 25	
Parkdale Motors ....Motors..		173 25	
Parkhurst, J.		3,915 25	
Passmore, T. A.		387 75	
Pegg, W. R.		294 25	
Pellerine, E.		291 00	
Pelletier, C.		393 25	
Pelotte, J. B.		382 25	
Pellow, C.		453 75	
Penitoché, M.		335 50	
Perrault, E.		320 00	
Peters, Geo.	815 00	420 75	
Disbursements	753 44		
Peters, J.		1,568 44	
Peterson, O.		305 25	
Picard, F.		330 00	
Pickering, E.		93 50	
Picott, James		151 25	
Peerce, C.		321 75	
Pierce, Thos.		234 00	
Pierce, Thos.		396 00	
Pierrot, W.		390 50	
Pigeon, C.		382 25	
Pingle, A.		390 50	
Pinnette, Jos.		170 50	
		353 75	
<i>Carried forward</i>		300,174 48	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		300,174 48	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Pollock, R.		403 25	
Poole, E. G.	1,675 00		
Disbursements	6,480 16		
		8,155 16	
Porteous, Wm.		379 50	
Post, J. A.		371 25	
Poulin, G.		319 00	
Powell, John		101 75	
Powell, M.		101 75	
Prange, L.		390 50	
Prentice, John		387 75	
Prestley, James		604 00	
Prestley, J.		409 75	
Pritchard, F.		704 00	
Quachazesick, J.		291 50	
Quibell, G.		371 25	
Quinn, Harry		145 75	
Quinn, J. J.		390 50	
Rabbitts, Max	640 00		
Disbursements	236 75		
		876 75	
Raciott, L.		336 25	
Racine, A.		329 00	
Ranson, Fred		365 75	
Redden, M. A.		379 50	
Regan, J. A. M.		401 50	
Reid, C. F.	384 00		
Disbursements	8 65		
		392 65	
Reid, H.		151 25	
Reilly, Wm.		19 25	
Reno, Nels		409 75	
Revell, L. O.	1,122 00		
Disbursements	1,090 46		
		2,212 46	
Reynolds, W. A.		189 00	
Reynolds, W. J.		5 50	
Reynold, J.	580 00		
Disbursements	107 30		
		687 30	
Richard, J.		85 25	
Richard, H.		404 25	
Richmond, W. A.		385 00	
Robb, James		343 75	
Robert, J.		236 50	
Robertson, J. A.		418 00	
Robertson, F.		39 00	
Robillard, A.		345 50	
Robinson, N. J.		11 00	
Robinson, J. B.		408 75	
Robinson, Moses		387 75	
Robinson, Wm.		247 50	
Robinson, S.		10 50	
Robinson, A.		91 00	
Rodgers, W. J.		324 50	
Rolph, Clark, Stone, Limited		618 45	
Rondan, A.		134 00	
Ross, A. C.		393 25	
Rowe, James		247 50	
<i>Carried forward</i>		325,588 50	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		325,588 50	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Ruddy, E. L. Co., Ltd., .....Supplies.		1,067 61	
Ruddy, Thos.		404 25	
Rudolph, L.		407 00	
Russell, Frank		9 00	
Ryan, W. H.		401 50	
Sadlo, J.		151 25	
Saums, F. E.		187 00	
Saunders, A.		261 25	
Sawdo, M.		85 25	
Sawyer, R.		387 75	
Sawyer, N.		382 25	
Scarlet, Ed.		46 75	
Scott, R.	492 00		
Disbursements	242 12		
		734 12	
Scott, F. A.		372 25	
Scott, F. E.		338 25	
Scott, H.		437 25	
Scythes and Co., Ltd.		153 75	
Sells, P. C.		412 50	
Semmard, E.		401 50	
Sharpe, James		354 75	
Shaw, H.		107 25	
Sheehan, D. J.		275 00	
Sheehan, Dan		379 50	
Sheesheegiven, S.		171 00	
Shields, J.		35 75	
Shields, H.	560 00		
Disbursements	71 45		
		631 45	
Shields, Ed.		6 00	
Sherfield, W. C.		121 00	
Shultz, F.		178 75	
Simmers, J. W.		390 50	
Simpson, M.		393 25	
Sinclair, D.		403 25	
Sing, S.		235 50	
Sing, W. H.	422 00		
Launch	1,200 00		
		1,622 00	
Singleton, J.		143 00	
Skully, Wm.		324 50	
Small, M. A.		115 50	
Smalles, G. R.		348 25	
Smellie, J.		387 75	
Smith, V.		704 00	
Smith, J. D. C.		560 00	
Smith, D.		403 25	
Smith, A.		397 75	
Smith, J. B.		356 00	
Smith, T. D.		382 25	
Smith, D.		348 25	
Smith, J.		253 00	
Smith, John		354 75	
Smith, J. H.		382 25	
Smith, Leslie		393 25	
Smith, Jos.		393 25	
Smith, M.		192 50	
Smyth, John		429 00	
<i>Carried Forward</i>		344,402 43	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		344,402 43	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Snaith, W. J.		387 75	
Snyder, F.		379 50	
Sonseise, P.		211 75	
Soulier, W.		379 50	
Spears, W. J.		107 00	
Spence, H.		68 75	
Spillett, J. J.		396 00	
Spillett, P. L.		437 25	
Spreadborough, N.		385 00	
Spreadborough, W.		379 50	
Staniforth, B.		379 50	
St. Lawrence, A.		272 25	
St. Mary, O.		49 50	
Steer, H.		228 25	
Stephens, R. W.		363 00	
Stevenson, J. W.		244 75	
Stewart, W.		209 00	
Stewart, B.		123 75	
Stewart, T.		324 50	
Stewart, J.		382 25	
Stewart, A.		403 25	
Stewart, J. D.		407 00	
Stewart, E. B.		401 50	
Stickanbee, P.		71 50	
Stirling, Alex.		2,878 97	
Stone, Lee		360 25	
Stopes, F.		330 00	
Stover, R.		338 25	
Strange, B.		418 00	
Stratton, R.		404 25	
Stringer, K.		143 00	
Sringer, B.		451 50	
Strutt, A.		88 00	
Sudds, D.		379 50	
Sullivan, M.		365 75	
Sullivan, M.		178 75	
Sutherland, Dave		216 00	
Sutherland, J. W.		431 75	
Swanson, G.		385 00	
Sweeney, L.		233 75	
Sweeney, J.		30 25	
Sword, D.		27 50	
Tabbert, H.		107 25	
Tackney, Thos.	815 00		
Disbursements	547 32		
		1,362 32	
Tait, A.		390 50	
Tait, J.		390 50	
Tallon, M.		297 00	
Tang, J.		376 75	
Tarling, C., Map Co. Maps ..		43 15	
Taylor, S.		85 25	
Taylor, John		308 00	
T. and N. O. Ry. Rent ..		40 00	
Teasdale, J.		170 50	
Tenzies, Wm.		305 25	
Terrien, Geo.		222 75	
Thibb, Elf		430 75	
Thomas, H.		216 00	
<i>Carried forward</i>		363,800 87	195,824 64

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		363,800 87	195,824 64
<i>FIRE RANGING.—Continued.</i>			
Thomas, W.		79 75	
Thomson, W. H.		379 50	
Thomson, Fred		409 75	
Thomson, John		412 50	
Thompson, J. W.		195 25	
Thompson, H. B.		156 00	
Tichborne, A.		616 00	
Tomilson, C.		376 75	
Toomer, S.		381 25	
Toutit, John		203 50	
Townsend, W.		52 25	
Townsend, J. E.		318 00	
Tremblay, E.		96 25	
Tremblay, E.		371 25	
Tripp, E. C.	648 00		
Disbursements	229 65		
		877 05	
Trowsse, Alf.	536 00		
Disbursements	213 80		
		749 80	
Tryon, W.		379 50	
Tucker, Wm.		371 25	
Turcott, L.		401 50	
Turcott, J.		348 00	
Turner, J. J. and Sons, Ltd.		821 54	
Tyson, John		379 50	
Urquhart, A.	860 00		
Disbursements	820 34		
		1,680 34	
Valliant, G.		170 50	
Van Dorp, C.		55 00	
Veley, Wm.		167 75	
Velmiff, Ed.		387 75	
Vincent, Thos.		327 25	
Visseau, Louis		376 75	
Vollick, C.		101 75	
Walder, W.		16 50	
Walker, Ed.		210 00	
Walker, R.		418 00	
Walker, Geo.		434 50	
Wallingford, M. F.		381 25	
Walmsley, H. H.		173 25	
Walsh, Isaac		379 50	
Ward, D.	640 00		
Disbursements	131 81		
		771 81	
Ward, J.		617 50	
Warner, J. S.		433 50	
Warren, D. L.		73 50	
Watson, Geo.		393 25	
Watters, A. M.		371 25	
Watts, Geo. Rent.		90 00	
Waugh, C. A.		332 75	
Weatherill, P.		46 75	
Weiler, C.		420 75	
Weir, Geo.		376 75	
Welsh, Jas.		379 50	
Western Forestry and Conservation Association. Supplies		24 38	
<i>Carried forward</i>		381,788 79	195,824 64

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.
<i>Brought forward</i>	381,788	79	195,824	64
FIRE RANGING.—Concluded.				
Whims, John	604	00		
Disbursements	76	30		
			680	30
White, A.			8	25
White, J.			396	00
Whitmore, D.			396	00
Whyte, J. A.			393	25
Wickens, H.			382	25
Wilkes, L.			57	75
Williams, S.			209	00
Williams, R. N.			110	00
Wilson, J. H.			371	25
Wilson, Frank			376	75
Wilson, James			407	00
Wilson, H.			79	75
Wilson, John			387	75
Wilson, B.			291	50
Wilson, D.	850	00		
Disbursements	1,170	94		
			2,020	94
Wisted, J.			167	75
Witherspoon, J.			63	25
Witzel, W. J.			319	00
Wood, J. E.			396	00
Woodcock, Geo.	584	00		
Disbursements	65	35		
			649	35
Woods, Wm.			390	50
Woods, T. J.	930	00		
Disbursements	802	92		
			1,732	92
Wright, J. S.			376	75
Wright, C.			352	00
Wright, Wm.			110	00
Wright, E.			354	75
Wynne, P.			420	75
Youmans, A.			354	75
Young, John			346	50
Young, Wm.			385	00
Young, M.			9	10
FOREST RESERVES, \$394,784.40.				
Temagami Reserve, \$48,009.52.				
Baker, Wm.			398	75
Baptiste, John			8	25
Barrett, Thos.			510	00
Becker, O.			299	75
Bell, John			189	75
Bernard, B.			192	50
Black, G.			371	25
Blackwell, J. J.			165	00
Blanchett, J.			244	75
Bonhomme, L.			162	25
Both, W.			484	25
Bowland, A.			324	50
Boyd, W. R.			365	75
Bracken, R.			393	25
<i>Carried forward</i>	4,110	00	590,609	54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		4,110 00	590,609 54
FOREST RESERVES.— <i>Continued.</i>			
Temagami Reserve.— <i>Continued.</i>			
Burden, John	840 00		
Disbursements	640 63		
		1,480 63	
Buchill, S. E.		319 00	
Cahill, B.		220 00	
Cameron, W. J.		407 00	
Campbell, J. M.	548 00		
Disbursements	189 05		
		737 05	
Carleton, Geo.		79 75	
Caswell, G.		211 75	
Caswell, E.		159 50	
Champlan, P.		63 25	
Chatson, F. C.		418 00	
Clarey, G.		357 50	
Clifford, John		324 50	
Coghill, J. M.	524 00		
Disbursements	99 50		
		623 50	
Connors, L.		246 00	
Connors, Thos.		379 50	
Coombes, W. C.		255 75	
Cooper, T.	1,009 75		
Disbursements	82 90		
		1,092 65	
Cowper, J. W.		354 75	
Crocker, K. J.		393 25	
Daynard, W. B.		154 00	
Desmereau, P.		365 75	
Didier, H.	825 00		
Disbursements	1,154 00		
		1,979 00	
Doherty, W.		198 00	
Downey, F.		228 25	
Ellingsworth, W.		151 25	
Ferris, R.		20 60	
Freve, A.		349 25	
Gale, W. J.		211 75	
Galer, R. B.		143 00	
Girard, S.		112 75	
Gray, Wm.		71 50	
Grendrod, S.		222 75	
Grenier, J.		66 00	
Guyott, J.		57 75	
Hamilton, H.		225 50	
Harper, T.		390 50	
Harrison, J. W.		958 50	
Hartley, Mark		412 50	
Hartt, I. B.	528 00		
Disbursements	120 55		
		648 55	
Heggarty, L. E.		136 50	
Henry, R.		57 50	
Hindson, C. E.	1,625 00		
Disbursements	1,394 60		
		3,019 60	
Hindson, M.		175 00	
<i>Carried forward</i>		22,589 08	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		22,589 08	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve—Continued.</i>			
Jacob, S. B.		24 75	
Jadouin, J.		46 75	
Jadouin, E.		46 75	
Jones, F.		225 50	
Kellie, J. D.		357 50	
Kettlewell, D. W.		368 50	
King, R.		93 50	
King, E.		71 50	
King, J.		16 50	
Kingsley, Ben.		173 25	
Lamarche, A.		20 00	
Lamarche, R.		20 00	
Lapierriere, A. P.		291 50	
Laronde, Jos.		280 50	
Laronde, John		280 50	
Lavoie, X.		374 00	
Lindsay, G. C.		382 25	
Little, R.		22 00	
Longuein, A.		316 25	
Longuein, L.		184 25	
Loyt, A.		321 75	
Luke, J.		66 00	
Mannly, H.		63 25	
MicMac, S.		16 50	
Mildure, F.		200 75	
Millichamp, T.		107 25	
Minard, A.		110 00	
Moriarity, M.		343 75	
Morin, J.		376 75	
Moore, D.		101 75	
Morrison, J.		355 00	
Murphy, J.		299 75	
Murphy, James		294 25	
McDonald, J. C.		250 25	
McDermott, Alex.		407 00	
McFayden, James	628 00		
Disbursements	176 25		
		804 25	
McGuire, M.		374 00	
McHughen, John		206 25	
McIntyre, James		363 00	
McKechnie, A.		349 25	
McKenzie, T.		302 50	
McKenzie, C.		82 00	
McLean, W.		231 00	
McLeish, W. J.		426 25	
McLeish, Wm.		82 50	
McMahon, P.		205 00	
McMullin, Wm.		297 00	
McNally, Jos.		305 25	
Naveau, James		90 75	
Naveau, Thos.		308 00	
Naveau, R.		167 75	
Obrey, J.		71 50	
Ogden, F.		258 50	
Olsen, T.		68 75	
Ostrander, A. E.		198 00	
<i>Carried forward</i>		34,690 33	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		34,690 33	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Temagami Reserve.—Concluded.</i>			
Pacquette, A.		269 50	
Page, A.		46 75	
Parent, B.		358 25	
Patterson, F. D. N.		115 50	
Perrault, Fred.		275 00	
Perrault, Wm.		277 75	
Petrant, W.		291 50	
Phillips, A. G. R.		244 75	
Pirie, J. B.		382 25	
Plaunt, Noel		305 25	
Puffer, D. S.		308 00	
Purdy, J.		228 25	
Rachine, J.		244 75	
Rastoule, F.		101 75	
Reesor, Geo. O.	576 25		
Disbursements	90 20		
		666 45	
Regan, D.		209 00	
Reilly, John		379 50	
Richardson, R.		379 50	
Ross, J. W.		313 50	
Ross, A.		313 50	
Roy, Thos.		374 00	
Sage, P.		361 75	
Simore, D.		104 50	
Stata, S.		352 00	
Steep, E.		236 50	
Stoner, R.		275 00	
Tongue, S.		308 00	
Tooke, S.		258 50	
Towers, R.		247 50	
Trothier, John		258 50	
Tuer, Wm.		231 00	
Turner, Joseph		349 25	
Tyrell, J. A.		244 75	
Viverais, M.		286 00	
Walker, James		409 75	
White, J.		363 00	
Whitebear, F.		33 00	
Wilcox, E. P.		360 25	
Williams, A.		79 75	
Wilmer, S.		110 00	
Wilson, Alex.		376 75	
Young, R. J.	860 00		
Disbursements	930 74		
		1,790 74	
Young, J.		198 00	
<i>Mississaga Reserve, \$24,454.34.</i>			
Abbey, Chas.		253 00	
Acheson, L.	840 00		
Disbursements	1,295 39		
		2,135 39	
Backer, C.		57 75	
Belaney, A.		394 25	
Belledeau, Geo.		55 00	
<i>Carried forward</i>		50,904 91	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		50,904 91	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississaga Reserve.—Continued.</i>			
Bennett, H.		228 25	
Boughman, A. M.		324 50	
Buisson, Wm.		376 75	
Cade, H.		178 75	
Carlson, F.		412 50	
Carpenter, R. J.	620 00		
Disbursements	236 35		
		856 35	
Causley, B.		409 75	
Catt, Wm.		44 00	
Champeux, H.		376 75	
Chartrand, T.		385 00	
Checkley, E.		280 50	
Cloute, Geo.		420 75	
Cloutier, H.		341 00	
Collins, N.		396 00	
Cousineau, M.		247 50	
Davidson, R. W.		382 25	
Davidson, R.		382 25	
Desbrian, F.		85 25	
Duval, C. A.	Disbursement	1,250 00	
Ecker, C. M.		407 00	
Egan, D.		371 25	
Godson, H.	613 75		
Disbursements	136 65		
		750 40	
Gray, E. J.		258 50	
Groulx, E.		261 25	
Hillman, John		283 25	
Howard, Wm.		140 25	
Huckson, A. H.	Disbursements	5 80	
Hussey, L.		396 00	
Jackpine, S.		110 00	
Jean, A.		620 00	
Jiguer, J.		228 25	
Jones, John		412 50	
Laundry, Alex.		233 75	
Leblanc, Lorne		420 75	
Legacy, F.		390 50	
Leveille, Frank		239 25	
Loosemore, S.		393 25	
Managness, J.		162 25	
Managness, M.		162 25	
Martin, J.		341 00	
Metooenese, Alex.		165 00	
Michel, John		181 50	
Miller, M.		140 25	
Miller, H.		140 25	
Moss, C.		93 50	
Murray, John		409 75	
McAllister, A. J.		387 75	
McAuley, Alex.		57 75	
McGrath, B.		335 50	
McIlmoyle, W.		409 75	
Nicholas, Herbert	560 00		
Disbursements	225 90		
		785 90	
<i>Carried forward</i>		67,977 36	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		67,977 36	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Mississauga Reserve.—Concluded.</i>			
O'Donnell, James		19 25	
Orange, Wm.		382 25	
Otter, B.		88 00	
Panter, A.		112 75	
Phillon, M.		368 50	
Reid, James		409 75	
Ruttledge, J.		283 25	
Sailor, H.		222 75	
Sailor, D.		151 25	
Seeley, S.		371 25	
Shawabik, P.		173 25	
Shawabik, S.		173 25	
Smith, J.		280 50	
Smith, Thos.		178 75	
Snooks, Geo.		49 50	
Spaniel, James		260 25	
St. Laurent, J.		126 00	
Tierney, T.		198 00	
Turner, S.		247 50	
Ugongin, Chas.		126 50	
Valen, L.		55 00	
Valois, A.		151 25	
Vice, L.		57 75	
<i>Nepigon Reserve, \$23,457.35.</i>			
Anderalcourt, A.		44 00	
Barker, A.		426 50	
Bouchard, J.		700 50	
Bouchard, M.		266 75	
Bouchard, W.		490 87	
Bouchard, D.		12 37	
Braggan, Wm.		363 00	
Cummins, T. A.	580 00		
Disbursements	1,644 53		
		2,224 53	
DeLaronde, J.		107 25	
Desmoulin, J.		1 37	
Donio, J.		363 00	
Donley, J. P.		387 75	
Erkkila, S.		30 00	
Esquaga, Louis		137 50	
Fitzback, J.		619 50	
Goodchild, Louis		266 75	
Halme, O.		24 00	
Jokila, N.		273 00	
Kerr, D. W.		453 75	
King, S.		291 50	
Lagard, A.		145 75	
Leo, Chas.		110 00	
Lofquist, M.		363 00	
Maki, J.		285 00	
Memo, J.		154 00	
Michael, S.		346 50	
Michael, A.		302 50	
Michael, R.		211 75	
Micholson, J.		586 25	
<i>Carried forward</i>		82,452 50	590,609 54

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		82,452 50	590,609 54
<i>FOREST RESERVES.—Continued.</i>			
<i>Nepigon Reserve.—Concluded.</i>			
Micholson, Geo.		253 00	
Moose, P.		134 75	
Moose, Harry		231 00	
Morriseau, Fred.		457 87	
Morriseau, D.		143 00	
McDonald, M. D.		44 00	
McLeod, E. H.	1,135 00		
Disbursements	3,025 74		
		4,160 74	
Nance, Thos.		346 50	
Nemo, A.		151 25	
Netemegetic, F.		365 75	
Nicholson, Chas.		129 25	
Odawa, J.		470 25	
Ojittimo, S.		365 75	
Oskopeda, J.		363 00	
Perkins, A. J.		823 50	
Poile, J.		253 00	
Poile, T.		451 00	
Poile, John		363 00	
Robinson, Peter		137 50	
Robinson, A.		145 75	
Shabawaykesick, A.		200 75	
Sponge, Wm.		363 00	
Thomson, J. G.		612 00	
Thomson, J.		143 00	
Thompson, Joseph		24 75	
Torrance, E. A.		379 50	
Walker, H.		382 25	
Ward, James		393 25	
Willan, Wm.	739 25		
Disbursements	6 60		
		745 85	
Young, J. J.		434 50	
<i>Eastern Reserve, \$3,424.13.</i>			
Bander, Wm.		401 50	
Bishop, H.		401 50	
Breen, James		401 50	
Gilmour, Ed.		162 25	
Hughes, Geo.		401 50	
Laundry, A.		401 50	
Lloyd, C.		233 75	
Myers, John		400 00	
Tapping, Thos.	600 00		
Disbursements	20 63		
		620 63	
<i>Sibley Reserve, \$100.00.</i>			
Oliver, J. A.		100 00	
			99,445 34
<i>CULLERS' ACT.</i>			
McDougall, J. T. ....Disbursements		6 00	
Green, Wm.	12 00		
Disbursements	3 10		
		15 10	21 10
<i>Carried forward</i>			690,075 98

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>					690,075	98
REFORESTRATION.						
Bell Telephone Company			33	60		
Supplies			2,213	30		
Labor			5,903	57		
Sundries			544	13		
					8,694	60
MINES AND MINING.						
Miller, W. G., Provincial Geologist, services	5,000	00				
Disbursements	226	76				
			5,226	76		
Knight, C. D., 1st Assistant Geologist, services..	2,500	00				
Disbursements	1,465	74				
			3,965	74		
Burrows, A. G., 2nd Assistant Geologist, services.	2,350	00				
Disbursements	610	85				
			2,960	85		
Hopkins, P. E., 3rd Assistant Geologist, services.	1,900	00				
Disbursements	1,575	06				
			3,475	06		
Rogers, W. R., Topographer, services	2,000	00				
Disbursements	64	24				
			2,064	24		
Bell, W. J., Cartographer, services			1,700	00		
Mickle, G. R., Mine Assessor, services	4,200	00				
Disbursements	303	82				
			4,503	82		
Godson, T. E., Mining Commissioner, services ...	4,500	00				
Morris, W. H., Mining Commissioner's Clerk						
services	1,700	00				
White, Miss N., Stenographer	772	17				
Disbursements	1,078	10				
			8,050	27		
Sutherland, T. F., Chief Inspector of Mines,						
services	3,300	00				
Disbursements	1,386	95				
			4,686	95		
Collins, E. A., 1st Assistant Inspector of Mines,						
services	3,000	00				
Disbursements	1,131	62				
			4,131	62		
McMillan, J. G., 2nd Assistant Inspector of Mines,						
services			2,270	00		
Bartlett, J., 3rd Assitant Inspector of Mines,						
services			2,270	00		
Stovel, J. H., 4th Assistant Inspector of Mines,						
services, for four months. Resigned	1,000	00				
Disbursements	320	67				
			1,320	67		
Webster, A. R., 4th Assistant Inspector of Mines,						
services, for five months	1,250	00				
Disbursements	434	50				
			1,684	50		
Jackson, P. A., Surveyor, services			1,500	00		
McArthur, T. A., Inspector of Recorders' Offices,						
services	800	00				
Disbursements	466	40				
			1,266	40		
<i>Carried forward</i>			51,076	88	698,770	58

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		51,076 88	698,770 58
<i>MINES AND MINING.—Concluded.</i>			
Beno, J. W., services	659 29		
Disbursements	447 46		
		1,106 75	
Clarke, C. J. Disbursements		14 20	
Crompton, R. B., services		120 00	
Davidson, John F., services		60 00	
Drury, Prof. C. W., services		150 00	
Estlin, E. S., services	2,042 31		
Disbursements	1,127 38		
		3,169 69	
Easton, M., services		94 23	
Kerr-Lawson, D. E., services		70 00	
Ledoux, Prof. A., services	484 61		
Disbursements	539 58		
		1,024 19	
McKechnie, A. B., services		70 00	
Near, A. E., services	859 29		
Disbursements	158 10		
		1,017 39	
Parsons, Prof. A. L., services	502 31		
Disbursements	598 60		
		1,100 91	
Scott, John, services	859 29		
Disbursements	304 65		
		1,163 94	
King's Printer		448 76	
Express		12 70	
Telegraphing		64 05	
Typewriter repairs, etc.		16 00	
Sundries		23 03	
			60,802 72
<i>RESEARCH WORK.</i>			
Clarke, A. L., services			1,166 00
<i>MINING RECORDERS.</i>			
Browning, A. J., Recorder	600 00		
Morgan, M. R., Assistant	83 00		
Loudon, W. E., Clerk	492 31		
Boyer, P. H., Clerk	75 00		
Disbursements	275 83		
		1,526 14	
Campbell, C. A., Recorder	1,138 41		
Shanahan, Miss M., Stenographer	362 70		
Disbursements	349 75		
		1,850 86	
Gauthier, G. H., Recorder	1,500 00		
O'Brien, J. D., Clerk	1,120 00		
Loudon, W. E., Clerk	134 62		
Disbursements	881 38		
		3,636 00	
Hough, J. A., Recorder	1,400 00		
Ginn, H. G., Clerk	1,074 65		
Loudon, W. E., Clerk	376 92		
Stewart, Miss H., Stenographer	380 00		
Disbursements	399 21		
		3,630 78	
<i>Carried forward</i>		10,643 78	760,739 30

Appendix No. 6.—Continued.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>		10,643 78	760,739 30
MINING RECORDERS.— <i>Concluded.</i>			
Miller, N., Recorder	1,100 00		
Disbursements	331 25	1,431 25	
Morgan, M. R., Recorder	583 00		
Disbursements	407 50	990 50	
Morgan, J. W., Recorder	1,098 00		
Disbursements	433 20	1,531 20	
McAulay, N. J., Recorder	1,900 00		
Sarsfield, J. M., Clerk	1,300 00		
Loudon, W. E., Clerk	138 46		
Munro, Miss E., Stenographer	780 00		
Disbursements	806 85	4,925 31	
McQuire, H. F., Recorder	500 00		
Disbursements	152 58	652 58	
Sheppard, H. E., Recorder	854 68		
Morgan, M. R., Assistant	167 00		
Loudon, W. E., Clerk	61 54		
Disbursements	148 01	1,231 23	
Spry, W. L., Recorder	900 00		
Disbursements	116 10	1,016 10	
Express	68 65		
King's Printer	1,120 02		
Telegraphing	20 33	1,209 00	
PROVINCIAL ASSAY OFFICE.			23,630 95
Leat, Arthur		529 35	
McNeill, W. K.	2,200 00		
Disbursements	63 40	2,263 40	
Rothwell, T. E.	1,574 00		
Disbursements	144 30	1,718 30	
Supplies	1,179 25		
Disbursements	233 22	1,412 47	
MINERAL DISPLAY AT EXHIBITIONS.			5,923 52
Clark, James, Services <i>re</i> Toronto Exhibition		77 00	
West, W. J., Services <i>re</i> Toronto Exhibition		57 00	
General Disbursements <i>re</i> Exhibitions		1,628 63	
			1,762 63
EXPERIMENTAL TREATMENT OF ORES			759 73
MINING COMMISSIONER'S JUDGEMENTS			275 00
SOCIETY MEMBERSHIP FEES			191 90
ANNUAL MEMBERSHIP FEES			35 75
SURVEYS			40,827 29
<i>Carried forward</i>			834,146 07

Appendix No. 6.—Continued.

Service.	\$	c.	\$	c.	\$	c.
<i>Brought forward</i>					834,146	07
BOARD OF SURVEYORS					200	00
INVESTIGATION OF TREE DISEASES					5,410	53
INSURANCE					1,234	98
ALLOWANCE TO SCHOOL SECTION IN TOWNSHIP OF SOUTH WALSHINGHAM					150	00
CANADIAN FORESTRY ASSOCIATION, GRANT					300	00
REFUNDS—Miscellaneous					25,561	54
COLONIZATION AND IMMIGRATION.						
PRINTING, ADVERTISING, ETC.			13,085	32		
LAND GUIDES				116	00	
EMIGRATION WORK IN GREAT BRITAIN			23,930	73		
ALLOWANCE TO RICHARD REID AND J. M. CLARK ..			3,112	00		
RENTAL IMMIGRATION OFFICE			1,473	39		
					41,717	44
CONTINGENCIES.						
<i>Departmental.</i>						
Printing and Binding	1,551	83				
Stationery	5,398	60				
				6,950	43	
Postage	1,524	90				
Express		186	23			
				1,711	13	
Telegraphing	529	91				
Car Fare		40	00			
				569	91	
Subscriptions		252	40			
Advertising	12,303	02				
				12,555	42	
Typewriters, repairs, etc.				1,451	97	
Cain, W. C., travelling expenses		25	00			
Draper, S., travelling expenses		144	90			
Ferguson, Hon. G. H., travelling expenses		900	00			
Grigg, A., travelling expenses		4	55			
Hele, C. C., travelling expenses		125	95			
Hutcheon, J., travelling expenses		589	85			
Niven, F. J., travelling expenses		47	70			
Robbins, H. M., travelling expenses		40	55			
Rorke, L. V., travelling expenses		173	45			
Work, J., travelling expenses		71	15			
				2,123	10	
Extra Clerks	9,234	05				
Maps	4,668	85				
Sundries		682	28			
				14,585	18	
					39,947	14
<i>Carried forward</i>					948,667	70

Appendix No. 6.—Concluded.

Service.	\$ c.	\$ c.	\$ c.
<i>Brought forward</i>			948,667 70
<i>CONTINGENCIES.—Concluded.</i>			
<i>Bureau of Mines.</i>			
Printing and Binding	2,899 03		
Stationery	2,840 47	5,739 50	
Postage	853 89		
Telegraphing	70 11		
Express and Cartage	28 68		
Advertising	1,475 33		
Subscriptions	430 32		
Maps	1,267 21	4,125 54	
Typewriters, repairs, etc.	221 45		
Gibson, T. W., travelling expenses	102 47		
Van der Voort, A., Searching Titles	359 50	683 42	
Extra Clerks	1,995 17		
Sundries	110 22	2,105 39	
			12 653 85
<i>Forestry.</i>			
Zavitz, E. J., travelling expenses		228 64	
Postage	389 32		
Typewriters, repairs, etc.	167 92		
Extra Clerks	1,176 00		
Supplies	1,047 23		
Sundries	212 69	2,993 16	
			3,221 80
<i>Colonization.</i>			
Printing and Binding	8 02		
Stationery	268 64	276 66	
Postage	150 58		
Express	74 59	225 17	
Telegraphing	113 38		
Subscriptions	48 50		
Typewriters, repairs, etc.	114 50	276 38	
Jones, R. A., travelling expenses	62 80		
Macdonell, H. A., travelling expenses	89 87		
Tutt, H., travelling expenses	19 45		
Sundries	122 05	294 17	
			1,072 38
			965,615 73

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 7.

Statement of expenses on account of various services under the direction of the Department of Lands, Forests and Mines for the year ending October 31st, 1918.

Service.	\$ c.	\$ c.
ALGONQUIN PROVINCIAL PARK	29,716 95	
ALGONQUIN PROVINCIAL PARK, CLEANING RIGHT-OF-WAY	149 08	29,866 03
QUETICO PROVINCIAL PARK		9,424 20
FUEL INVESTIGATION		54,322 80
VETERANS' COMMUTATION		150 00
ROYAL NICKEL COMMISSION		10,182 05
LEGAL INVESTIGATIONS		1,285 00
BOUNTY ACT, EDWARD VII, CAP. 14.		
Deloro Mining and Reduction Co.	19,284 26	
Coniagas Reduction Co., Ltd.	21,345 63	
Metals Chemical Co., Ltd.	12,689 71	
Canadian Smelting and Refining Co.	1,707 89	55,027 49
		160,257 57

D. GEO. ROSS,
Accountant.

ALBERT GRIGG,
Deputy Minister of Lands and Forests,

Appendix No. 8.

PATENTS OFFICE (LANDS BRANCH).

Statement of Patents, etc., issued from 1st November, 1917, to 31st October, 1918.

Public Lands (late Crown)	390
" " (late School)	35
" " (late Clergy Reserves)	6
" " (University)	13
Free Grant Lands (Act of 1913)	297
" " (Act of 1901) (Veterans)	115
Mining Lands (Patents)	337
Mining Leases	68
Crown Leases	20
Licenses of Occupation	50
Timagami Island Leases	2
Sand and Gravel Licenses	18
Total	1,351

CHARLES S. JONES,
Patents Clerk.
W. C. CAIN,
Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix

WOODS AND

Statement of Timber and Amounts accrued from Timber Dues, Ground

QUANTITY AND

Agencies.	Area covered by timber licenses.	Saw logs.				Boom and	
		Pine.		Other.		Pine.	
	Square miles.	Pieces	Feet B.M.	Pieces.	Feet B.M.	Pieces.	Feet B.M.
Western Timber District	12,198	5,095,221	197,181,151	654,582	18,268,281	49,542	5,873,261
Belleville Timber District	693	51,520	1,039,634	68,300	2,060,862	267	28,829
Ottawa Timber District	3,997	311,827	18,691,395	238,052	7,273,194	3,553	409,558
	16,888	5,458,568	216,912,180	960,934	27,602,337	53,362	6,311 648

General Statement

Agencies.	Posts.	Poles.	Bolts.	Pulpwood	Pine.			
	Pieces.	Pieces.	Cords.	Cords.	Pieces.	Cubic Feet.	Transfer bonus.	Interest.
Western Timber District	25,990	1,382	1,816	315,140	1,452	78,874	\$ 3,495 00	c. 15,678 03
Belleville Timber District	3,419	.....	.....	1,899	.....	.....	85 00	125 27
Ottawa Timber District	294	835	.....	21,524	.....	.....	1,160 00	365 59
	29,703	2,217	1,816	338,563	1,452	78,874	4,740 00	16,168 89

JOHN HOUSER,
Chief Clerk in Charge.

No. 9.

FORESTS.

Rent and Bonus during the year ending 31st October, 1918.

DESCRIPTION OF TIMBER.

Dimension.		Cedar.	Piling.				Cordwood.		Tan Bark.	Railway Ties.
Other.							Hard.	Soft.		
Pieces.	Feet B.M.	Lineal feet.	Lineal feet.	Pieces	Feet B.M.	Cords.	Cords.	Cords.		
10,424	992,625	3,436	125,402	1,090	116,627	32,442	24,520	2,410	2,088,935	
1,355	259,661	.....	.....	.....	.....	746	22	347	3,500
4,030	514,150	.....	.....	.....	.....	63	4,022	870	1,664
15,809	1,766,436	3,436	125,402	1,090	116,627	33,251	28,564	3,627	2,094,999	

of Timber.—Concluded.

Amounts accrued.

Trespass.	Timber dues.	Bonus.	Deposits timber sales.	Ground rent.	Fire protection.	Total.
\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
30,759 80	673,427 12	468,038 88	118,450 00	62,005 00	159,436 87	1,531,290 70
789 45	4,421 57	683 54	.....	5,277 00	4,217 60	15,599 43
374 16	40,835 95	.....	.....	19,940 00	26,118 60	88,794 30
31,923 41	718,684 64	468,722 42	118,450 00	87,222 00	189,773 07	1,635,684 43

ALBERT GRIGG,
Deputy Minister.

Appendix No. 10.

WOODS AND FORESTS BRANCH.

Statement of Revenue collected during the year ending October 31st, 1918.

Amount of Western collections at Department	\$1,653,014 58
do Belleville collections at Department	15,020 37
do Ottawa collections at Department	88,050 30
	<hr/>
	\$1,756,085 25

WOODS AND FORESTS.

Bonus	\$679,304 17
Timber dues	795,004 08
Ground rent	87,263 93
Transfer fees	4,740 00
Fire protection	189,773 07
	<hr/>
	\$1,756,085 25

WOODS AND FORESTS BRANCH REVENUE.

October 31st, 1918.

WESTERN DISTRICT—

Timber dues	\$733,704 43
Bonus	560,245 25
Ground rent	62,005 00
Interest on dues	15,675 33
Interest on ground rent	2 70
Transfer fees	3,495 00
Timber sale deposits	118,450 00
Fire protection	159,436 87
	<hr/>
	\$1,653,014 58

OTTAWA DISTRICT—

Timber dues	\$40,466 11
Ground rent	19,940 00
Interest on dues	327 16
Interest on ground rent	38 43
Transfer fees	1,160 00
Fire protection	26,118 60
	<hr/>
	88,050 30

BELLEVILLE DISTRICT—

Timber dues	\$4,706 58
Bonus	608 92
Ground rent	5,277 00
Interest on dues	124 47
Interest on ground rent	0 80
Transfer fees	85 00
Fire protection	4,217 60
	<hr/>
	15,020 37
	<hr/>
	\$1,756,085 25

JOHN HOUSER,
Chief Clerk in Charge.ALBERT GRIGG,
Deputy Minister,

Appendix No. 11.

Statement of work done in the Military Office, Lands Branch of the Department of Lands, Forests and Mines, during the year ending October 31st, 1918.

Reference for Veterans' Patents issued	115
Locations under military certificates	23
Certificates applied in payment of lands	11
Certificates surrendered for commutation money	3
Letters received	1,650
Letters written	1,920
Special letters to agents	240
Special letters to mining recorders	92
Maps and reports supplied to veterans	280
Printed forms sent out	320
Copies of Veteran Act supplied	18

H. E. JOHNSTON,
Military Clerk.

W. C. CAIN,
Chief Clerk in Charge.

ALBERT GRIGG,
Deputy Minister,

Appendix No. 12.

Memorandum of parties who passed the Cullers' Examination of 1918.

Rabbitts, Malcolm, 91 Winnipeg Ave., Port Arthur, Ont., examined at Kenora, August 28th, 1918, licensed October 1st, 1918.

Street, John Royden, c/o Jas. Stewart, Port Arthur, Ont., examined at Kenora, August 28th, 1918, licensed October 1st, 1918.

Appendix No. 13.

RECORDS BRANCH, 1917-18.

Communications Received:

From Crown Lands Agents	5,910
" Mining Recorders	2,883
" Crown Timber Agents	4,408
" Homestead Inspectors	1,320
" Superintendent Algonquin Park	496
" Superintendent, Quetico Park	123
Orders-in-Council	153
Telegrams	282
Soldiers and Sailors (letters)	660
Nickel Commission	(Figures supplied by them) 1,500
Northern Development Branch	" " " 8,203
Colonization Branch	" " " 5,008
Loan Commissioner	" " " 2,978
Mining Commissioner	" " " 2,989
Forestry Branch	" " " 4,782
Mine Assessor	" " " 1,865
Mine Inspector	" " " 1,712
Provincial Geologist	" " " 404
All other sources	" " " 29,151
Total incoming (Minister's office not included)	74,827

Communications Sent Out:

To Crown Agents, Inspectors, Rangers and Park Superintendents	17,800
To General Public	20,614
Circular letters (timber sales)	1,790
Maps and blue prints	2,898
Mining Reports to foreign countries	520
Mining Reports to United States and other countries	145
Mining Acts	1,400
Nickel Commission (letters)	(Figures supplied by them) 1,000
Nickel Commission (reports)	" " " 850
Northern Development Branch (letters)	" " " 6,202
Northern Development Branch (seed grain)	" " " 1,348
Colonization Branch (letters)	" " " 4,147
Colonization Branch (Northern Ontario literature)	" " " 17,656
Colonization Branch (Ontario maps)	" " " 1,236
Loan Commissioner	" " " 5,316
Mining Commissioner (letters)	" " " 6,033
Mining Commissioner (orders)	" " " 799
Forestry Branch (letters)	" " " 7,584
Forestry Branch (circulars)	" " " 2,250
Forestry Branch (parcels by post)	" " " 450
Mine Assessor	" " " 1,865
Mine Inspector	" " " 1,211
Provincial Geologist	" " " 382
Total outgoing (Minister's office not included)	103,496

Postage:

Postage for the year, Records Branch	\$2,819 38
" " " Colonization Branch	113 62
" " " Loan Commissioner	150 68
" " " Forestry Branch	380 00

Files:

New files issued, general	5,363
" " " accounts chargeable	511
" " " accounts free	193

ALBERT GRIGG,
Deputy Minister.

S. K. BURDIN,
Chief Clerk, Records Branch.

Appendix No. 14.

Statement showing the number of Locatees and of acres located; of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties and of patents issued in Free Grant Townships during the year ending 31st October, 1918.

[illegible]

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Ryerson.....	Parry Sound..	Dr. J. S. Freeborn, Magnetawan	2	199	1	1	1	100	4	715
Spence	"	"	1	100	1	1	1	100	2	199
Strong	"	"	1	100	1	1	1	100	1	100
Armour	Parry Sound..	W. Jenkin, Emsdale..	2	193	2	2	2	193	2	305
Bethune	"	"	3	579	1	1	3	501	2	301
Joly	"	"	3	579	1	1	4	670	2	301
McMurrich...	"	"	1	100	1	1	1	100	1	96
Perry	"	"	1	100	1	1	1	100	2	184
Proudfoot...	"	"	1	100	1	2	3	349	4	446
Hardy	Parry Sound..	H. J. Ellis, Powassan.	1	100	1	1	1	100	1	100
Himsworth ..	"	"	6	815	2	118	5	109	1	123
Laurier	"	"	1	100	1	1	1	118	1	100
Nipissing	"	"	4	500	3	276	3	276	1	100
Patterson...	"	"	1	190	1	2	1	190	1	23
Bonfield.....	Nipissing	W. J. Parsons, North	10	1,329	9	900	10	1,800	10	1,800
Boulter	"	" Bay	1	102	1	102	1	102	2	236
Chisholm	"	"	8	1,075	6	712	4	400	4	400
Ferris	"	"	6	799	4	499	9	1,120	9	1,120
Anson	Haliburton ...	R. H. Baker, Minden..	2	181	5	500	3	452½	2	202
Glamorgan ..	"	"	5	634½	2	115½	2	289	3	197
Hindon	"	"	1	100	1	100	1	100	1	100
Lutterworth..	"	"	1	100	1	100	1	100	1	100
Minden	"	"	3	270½	2	195	3	200	3	200
Snowdon	"	"	1	90	1	45	1	90	2	377½
Stanhope.....	"	"	1	90	1	45	1	90	4	400
Anstruther...	Peterborough.	William Hales, Apsley	1	100	1	100	1	100	1	100
Burleigh, N.D.	"	"	1	100	1	100	1	100	1	100
" S.D.	"	"	1	100	1	100	1	100	1	100
Chandos	"	"	1	100	1	100	1	100	1	100
Methuen	"	"	1	100	1	100	1	100	1	100
Cardiff.....	Haliburton ...	A. N. Wilson, Kinmount	2	181	5	500	3	452½	2	202
Cavendish....	Peterborough.	"	3	263	1	100	1	100	1	100
Galway	"	"	2	200	4	519	1	222	1	222
Monmouth...	Haliburton ...	"	4	562	4	487	3	468	3	468
Bangor	Hastings	W. J. Douglas, May-	3	345	3	346	2	84	2	84
Carlow	"	" "nooth	1	100	2	159	10	1,279	4	519
Cashel	"	"	2	288	1	82	1	100	4	706
Dungannon ..	"	"	2	312	3	412	1	252	1	252
Faraday	"	"	1	100	1	100	1	100	1	100
Herschel	"	"	1	100	1	100	1	100	1	100
Limerick.....	"	"	1	100	1	100	1	100	2	150
Mayo	"	"	1	100	1	100	1	100	2	257½
Monteagle ..	"	"	1	100	1	100	1	100	2	181
McClure	"	"	1	98	1	98	1	98	3	459
Wicklow	"	"	5	550	1	5	1	200	1	200
Wollaston....	"	"	1	100	1	99	1	209	1	209
Algona, S....	Renfrew.....	Adam Prince, Wilno...	1	100	1	100	1	100	1	100
Brougham ..	"	"	1	100	1	100	1	100	1	100
Brudenell ..	"	"	1	100	1	100	1	100	1	100
Burns	"	"	1	100	1	100	1	100	1	100

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Grattan	Renfrew	Adam Prince, Wilno...	..	..	..	..	..	..	3	300
Griffith .....	"	"	..	..	..	..	..	..	..	..
Hagarty	"	"	3	251	1	22	..	..	4	372
Jones .....	"	"	..	..	..	..	..	..	..	..
Lyell	"	"	3	410	..	..	..	..	1	185
Lyndoch .....	"	"	..	..	..	..	..	..	..	..
Matawatchan.	"	"	2	200	..	..	..	..	1	189
Radeliffe .....	"	"	..	..	..	..	..	..	..	..
Raglan	"	"	1	100	..	..	..	..	4	400
Richards	"	"	1	94	..	..	..	..	1	92½
Sebastopol ..	"	"	1	140	..	..	..	..	1	80
Sherwood .....	"	"	..	..	..	..	..	..	1	100
Algona, N....	Renfrew	Finlay Watt, Pembroke	1	45	..	..	..	..	..	..
Alice .....	"	"	..	..	..	..	1	200	2	173
Buchanan .....	"	"	..	..	..	..	..	..	..	..
Clara	"	"	1	204	1	64	..	..	1	64
Fraser	"	"	4	381	..	..	..	..	1	100
Head	"	"	1	100	..	..	..	..	..	..
Maria .....	"	"	..	..	..	..	..	..	..	..
McKay .....	"	"	..	..	..	..	..	..	..	..
Petawawa .....	"	"	..	..	..	..	..	..	..	..
Rolph	"	"	1	98	..	..	..	..	..	..
Wilberforce ..	"	"	..	..	..	..	..	..	..	..
Wylie (pt.)...	"	"	3	297	..	..	..	..	..	..
Calvin	Nipissing	Robt. Small, Mattawa	1	100	..	..	1	100	..	..
Cameron (pt.).	"	"	16	2,003	1	18	2	193	2	218
Lauder	"	"	1	102	..	..	1	102	..	..
Mattawan .....	"	"	..	..	..	..	..	..	2	197
Papineau	"	"	4	500	..	..	1	100	2	157
Korah	Algoma	Edward Noble, Sault	..	..	1	2	..	..	1	162
Parke	"	Ste. Marie	..	..	..	..	..	..	..	..
Prince	"	"	1	80	..	..	5	638	..	..
Aberdeen	Algoma	Thos. Dodds, Thessalon	1	163	..	..	..	..	..	..
" add. ....	"	"	..	..	..	..	..	..	..	..
Galbraith .....	"	"	..	..	..	..	..	..	1	166½
Lefroy .....	"	"	..	..	..	..	..	..	..	..
Plummer .....	"	"	..	..	..	..	..	..	..	..
" add. ....	"	"	..	..	..	..	..	..	..	..
St. Joseph Is'd	Algoma	W. E. Whybourne, Marksville	11	1,305	1	18	11	1,305	5	622
St. Joseph	"	"	..	..	..	..	..	..	..	..
Ch'n'l Is'd .....	"	"	..	..	..	..	..	..	..	..
Baldwin	Algoma	Edward Arthurs,	1	161	1	1	1	160	2	317½
Merritt	"	Espanola	1	128	..	..	..	..	..	..
Blake	Thunder Bay.	W. A. Burrows, Port	..	..	..	..	4	640	1	160
Coumee	"	Arthur	4	426½	6	241½	2	239½	13	1,043
Crooks	"	"	1	160	..	..	11	1,616	3	485½
Dawson Road.	"	"	5	393	5	189½	7	694	6	523½
Dorion	"	"	1	160	..	..	1	160	4	637½
Gillies .....	"	"	..	..	1	79	..	..	2	239
Gorham	"	"	1	164½	3	222½	3	462	4	543
Lybster	"	"	1	80	..	..	..	..	1	80
Marks .....	"	"	..	..	1	1½	..	..	1	161½
McGregor	"	"	5	801	..	..	2	305	2	201½
McIntyre .....	"	"	..	..	..	..	..	..	..	..

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No. of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
O'Connor.....	Thunder Bay..	W. A. Burrows, Port	...	...	...	...	...	...	1	160
Oliver.....	"	" Arthur	1	157	...	...	1	157	1	161
Paipoonge, N R	"	"	...	...	...	...	...	...	1	96
" SR	"	"	...	...	...	...	...	...	1	160
Pardee.....	"	"	...	...	...	...	2	280	1	160
Pearson.....	"	"	2	320 $\frac{1}{2}$	...	...	1	160	...	...
Scoble.....	"	"	1	159 $\frac{1}{2}$	...	...	3	470	2	318 $\frac{1}{2}$
Stirling.....	"	"	11	1,291 $\frac{1}{2}$	1	160	15	2,367	1	159 $\frac{1}{2}$
Strange.....	"	"	...	...	...	...	1	158	1	157
Ware.....	"	"	5	560	3	107 $\frac{1}{2}$	2	254	10	966
Atwood.....	Rainy River..	William Cameron,	...	...	...	...	...	...	...	...
Blue.....	"	" Stratton	...	...	1	81	...	...	3	394
Curran.....	"	"	...	...	...	...	...	...	...	...
Dewart.....	"	"	1	162	...	...	1	162	...	...
Dilke.....	"	"	...	...	...	...	...	...	...	...
Morley.....	"	"	1	164	...	...	1	164	...	...
Morson.....	"	"	3	311 $\frac{1}{2}$	3	121	9	934 $\frac{1}{2}$	3	659
McCrosson...	"	"	2	321	...	...	2	321	...	...
Nelles.....	"	"	1	121 $\frac{1}{2}$	...	...	...	...	2	242
Pattullo....	"	"	5	594 $\frac{1}{2}$	1	2	3	356 $\frac{1}{2}$	2	243
Pratt.....	"	"	...	...	...	...	...	...	1	156 $\frac{1}{2}$
Rosebery...	"	"	...	...	...	...	...	...	...	...
Shenston....	"	"	...	...	...	...	...	...	1	81
Sifton.....	"	"	3	480	2	97 $\frac{1}{2}$	6	1,213	3	377 $\frac{1}{2}$
Spohn.....	"	"	3	501 $\frac{1}{2}$	1	81	3	503 $\frac{1}{2}$	1	157 $\frac{1}{2}$
Sutherland...	"	"	2	319 $\frac{1}{2}$	1	1	2	319 $\frac{1}{2}$	1	1
Tait.....	"	"	...	...	...	...	2	286	...	...
Tovell.....	"	"	...	...	1	17 $\frac{1}{2}$	...	...	2	320
Worthington..	"	"	...	...	1	4	...	...	2	271
Aylsworth...	Rainy River..	Alex. McFayden, Emo.	...	...	...	...	...	...	...	...
Barwick.....	"	"	...	...	...	...	...	...	...	...
Burriss.....	"	"	1	176 $\frac{1}{2}$	...	...	1	176 $\frac{1}{2}$	1	80
Carpenter...	"	"	...	...	2	20 $\frac{1}{2}$	1	163	1	161 $\frac{1}{2}$
Crozier.....	"	"	1	164	2	200	1	164	2	322
Dance.....	"	"	2	319 $\frac{1}{2}$	1	...	1	160	1	165 $\frac{1}{2}$
Devlin.....	"	"	...	...	1	6	...	...	3	368 $\frac{1}{2}$
Dobie.....	"	"	1	173	1	...	...	...	2	321
Fleming.....	"	"	...	...	...	...	...	...	...	...
Kingsford...	"	"	2	318	...	...	2	198	1	159 $\frac{1}{2}$
Lash.....	"	"	...	...	2	42	...	...	3	210
Mather.....	"	"	4	645 $\frac{1}{2}$	2	80 $\frac{1}{2}$	6	956 $\frac{1}{2}$	3	258 $\frac{1}{2}$
Miscampbell.	"	"	...	...	...	...	...	...	1	159
Potts.....	"	"	...	...	3	323	1	159	3	483
Richardson...	"	"	1	80	...	...	2	320 $\frac{1}{2}$	2	317 $\frac{1}{2}$
Roddick.....	"	"	...	...	...	...	...	...	...	...
Woodyatt....	"	"	...	...	...	...	...	...	...	...
Aubrey.....	Kenora.....	J. E. Gibson, Dryden..	2	239	...	...	2	193	1	151
Britton.....	"	"	2	322	...	...	1	162	...	...
Eton.....	"	"	2	320	...	...	2	320	...	...
Langton.....	"	"	...	...	8	23	...	...	8	24
Melgund.....	"	"	...	...	...	...	1	106	...	...
Mutrie.....	"	"	3	380	...	...	4	432	...	...
Redvers.....	"	"	2	302	1	117	3	462 $\frac{1}{2}$	...	...
Rowell.....	"	"	...	...	...	...	1	103 $\frac{1}{2}$	...	...
Rugby.....	"	"	...	...	...	...	...	...	1	160
Sanford.....	"	"	1	80	1	80	1	80	1	159 $\frac{1}{2}$
Southworth..	"	"	7	853 $\frac{1}{2}$	...	...	4	534	1	161

Appendix No. 14.—Continued.

Township.	District or County.	Agent.	No. of persons located.	No of acres located.	No. of purchasers.	No. of acres sold.	No. of persons cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Temple.....	Kenora	J. E. Gibson, Dryden..	1	160	.....	.....	2	320	.....	122
Van Horne ...	" .....	" .....	.....	.....	.....	.....	1	120	2	316
Wabigoon	"	"	7	1,120½	1	76½	6	941½	3	523½
Wainwright ..	"	"	4	665½	.....	.....	3	478½	1	160
Zealand	"	"	3	506	2	245	5	724½	6	243
Melick	Kenora	W. L. Spry, Kenora...	3	480	.....	.....	4	639½	2	239½
Pellatt	"	"	4	468	2	140½	4	514	2	246½
Balfour	Sudbury.....	J. K. MacLennan, Sud-	1	160	.....	.....	1	160	.....	.....
Bleazard	"	bury .....	.....	.....	.....	.....	.....	.....	3	122½
Broder	"	"	1	202	2	109½	.....	.....	4	655½
Capreol .....	" .....	" .....	.....	.....	1	200	1	146	1	40
Chapleau.....	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
Dill .....	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
Garson .....	" .....	" .....	.....	.....	.....	.....	1	163	1	154½
Hammer .....	" .....	" .....	.....	.....	.....	.....	.....	.....	1	160½
Lumsden.....	"	"	1	160	.....	.....	.....	.....	2	321½
Morgan .....	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
Neelon	"	"	2	317½	1	3½	9	1,231	2	316
Rayside .....	" .....	" .....	.....	.....	.....	.....	.....	.....	1	101½
Appelby	Sudbury	John Brown, Markstay	5	648½	1	1½	4	566	.....	.....
Casimir	"	"	2	159½	.....	.....	.....	.....	1	141
Dunnet	"	"	1	141	.....	.....	.....	.....	.....	.....
Hagar	"	"	7	1,059½	.....	.....	3	480	1	100
Jennings .....	" .....	" .....	.....	.....	1	80½	1	161	1	159
Kirkpatrick ..	Nipissing	"	9	1,245½	2	29	.....	.....	6	970
Ratter	Sudbury	"	4	585	.....	.....	1	160	2	314
Caldwell	Nipissing	J. A. Phillon, Sturgeon	3	320	.....	.....	.....	.....	9	1,131
Cosby	Sudbury	Falls	2	321	.....	.....	.....	.....	1	160½
Grant	Nipissing	"	1	147	.....	.....	1	147	1	159½
Macpherson ..	"	"	8	863½	3	3	.....	.....	8	1,184½
Martland	Sudbury	"	2	320½	.....	.....	1	160	1	160½
Springer	Nipissing	"	4	355	.....	.....	.....	.....	5	412
Abinger	Lennox and Addington	Charles Both, Denbigh	.....	.....	.....	.....	.....	.....	.....	.....
Canonto, S....	Frontenac....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
" N.....	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
Clarendon....	" .....	" .....	.....	.....	1	2	.....	.....	.....	.....
Denbigh..	Lennox and Addington	"	1	199	.....	.....	.....	.....	.....	.....
Miller (pt.)...	Frontenac....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
Palmerston	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
McClintock ...	Haliburton....	Unattached .....	.....	.....	.....	.....	.....	.....	.....	.....
Airy	Nipissing.....	"	2	263½	.....	.....	1	106	.....	.....
Finlayson .....	" .....	" .....	.....	.....	3	48½	.....	.....	8	164
Murchison .....	" .....	" .....	.....	.....	.....	.....	2	267	3	273½
Sabine .....	" .....	" .....	.....	.....	.....	.....	.....	.....	.....	.....
*O'Brien	Temiskaming.	"	49	.....	.....	.....	.....	.....	.....	5,018
*Owens	"	"	4	.....	.....	.....	.....	.....	.....	477
			425	54,182½	110	4,570½	360	47,715½	406	47,695

*Located under Returned Soldiers' and Sailors' Land Settlement Act, 1917

No. of lots assigned 166

No. of acres assigned 20,970

Appendix No. 14.—Concluded.

ISLANDS SOLD

Township	District or County	Agent	—
Islands in Lake of Bays, Franklin	Muskoka	J. B. Brown, Bracebridge	53/100
Island in Muskoka.....	} “	“ “	5
Part of Craigenputtock, Muskoka			
Island D. B. Conger	Parry Sound.....	Miss J. M. Campbell, Parry Sound	8
“ Phoenix “	“	“ “	4.50/100
“ B 217 “	“	“ “	7.80/100
“ B 67 “	“	“ “	1.30/100
“ 372 A., Harrison	“	“ “	37/100
(Pt.) H. B. 2 “	“	“ “	6.60/100
Island A 660 “	“	“ “	1.34/100
“ A 661 “	“	“ “	2.35/100
“ A 499 “	“	“ “	4.36/100
“ B 502 Cowper	“	“ “	4
“ B 504 “	“	“ “	5.50/100
“ B 316 “	“	“ “	40/100
“ B 443 “	“	“ “	90/100
Island in Wauquimakog Lake, Wilson	“	“ “	14.75/100
Nivcent Island, Patterson.....	“	W. H. Ellis, Powassan ..	2. 6/100
Island No. 2, Cavendish.....	Peterborough.....	A. N. Wilson, Kinmount.	8
			77½

SELBY DRAPER, Free Grants Clerk.
W. C. CAIN, Chief Clerk.

ALBERT GRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 15. *sale Agri*

Statement showing the number of purchasers and of acres sold; of lots resumed for non-performance of the settlement duties; and of patents issued in Townships other than Free Grant during the year ending 31st October, 1918.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Blount	Temiskaming.	S. J. Dempsay, Cochrane	370½	3	2	224	.....	.....
Brower	"	"	290½	2	3	454	.....	.....
Calder	"	"	726	5	3	452	.....	.....
Clute	"	"	2,248	15	16	2,472	5	784
Colquhoun .....	"	"	.....	.....	.....	.....	.....	.....
Fauquier	"	"	1,510	11	6	1,074	3	449
Fournier	"	"	619½	4	1	151	.....	.....
Fox	"	"	789	5	2	304	.....	.....
Glackmeyer ..	"	"	302	2	2	281	9	1,055
Kennedy	"	"	450	3	1	152	.....	.....
Lamarche	"	"	92	1	5	796	2	326
Leitch .....	"	"	.....	.....	1	80	.....	.....
Newmarket ..	"	"	1,260	8	5	804½	.....	.....
Pyne	"	"	989½	6	4	566½	.....	.....
Shackleton ..	"	"	1,512	10	9	1,168	.....	.....
Catharine	Temiskaming.	Jos. Woollings, Englehart	.....	.....	2	159½	1	152½
Chamberlain ..	"	"	158½	1	.....	.....	3	474½
Dack .....	"	"	.....	.....	.....	.....	1	160½
Eby	"	"	200	5	.....	.....	5	200
Evanturel	"	"	161	1	.....	.....	3	397
Gross	"	"	317	2	6	954	.....	.....
Ingram	"	"	156	1	1	157½	.....	.....
Marter	"	"	320½	2	4	639½	2	201
Marquis	"	"	320	2	2	320	1	158½
Otto .....	"	"	.....	.....	.....	.....	15	700
Pacaud	"	"	1,381	8	4	638½	1	40½
Pense	"	"	509½	4	.....	.....	.....	.....
Robillard	"	"	103	1	.....	.....	2	266
Savard	"	"	319	2	.....	.....	2	320
Sharpe	"	"	638½	4	1	159½	4	601
Truax	"	"	160	1	2	317	.....	.....
Armstrong ..	Temiskaming.	J. W. Bolger, New Lis-	.....	.....	.....	.....	3	477½
Auld	"	" " keard	.....	.....	2	215	.....	.....
Beauchamp ..	"	"	158½	1	2	269½	3	479
Brethour	"	"	320	2	.....	.....	6	958
Bryce	"	"	772	5	5	899	1	40
Bucke	"	"	402	3	.....	.....	4	587
Cane	"	"	402½	3	1	80	1	40
Casey .....	"	"	.....	.....	.....	.....	17	1,000
Dymond	"	"	159½	1	.....	.....	4	647
Firstbrook ..	"	"	365	3	2	325	1	40
Harley .....	"	"	.....	.....	.....	.....	2	320
Harris	"	"	80	1	.....	.....	1	158
Henwood	"	"	467½	3	.....	.....	5	654
Hilliard	"	"	324	2	1	159	2	310
Hudson .....	"	"	.....	.....	1	134	3	479
Kerns	"	"	160	1	.....	.....	4	396
Lundy	"	"	165½	1	1	160½	1	159
Tudhope	"	"	603½	4	5	908	5	200½
Smyth	Temiskaming.	H. E. Sheppard, Elk Lake	319½	2	1	158½	3	120
Lorrain	Temiskaming.	Neil J. McAulay, Hailey- bury	583½	.....	1	160	2	93½

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Beatty	Temiskaming.	F. E. Ginn, Matheson ..	545	4	1	319½	10	664
Benoit	"	"	93½	7	.....	.....	.....	.....
Bond	"	"	1,769	11	3	397½	.....	.....
Bowman	"	"	156	1	5	801	5	768
Calvert	"	"	635½	4	1	320½	1	160
Carr	"	"	626	4	2	317	7	1,078
Clergue	"	"	639½	4	4	797	6	522
Currie	"	"	464½	3	4	592	1	160½
Dundonald	"	"	694	5	2	835½	.....	.....
Evelyn	"	"	325½	3	2	325½	.....	.....
German	"	"	438½	3	9	1,468	1	2
Hislop	"	"	1,743	11	6	1,020	1	½
Matheson	"	"	471½	3	2	213½	1	160
Mountjoy	"	"	1,811	12	4	787	1	148½
McCart	"	"	748	5	1	323½	.....	.....
Playfair	"	"	921	6	1	313½	1	161
Stock	"	"	474	3	8	491	1	144
Taylor	"	"	456½	4	4	749½	2	1½
Walker	"	"	717	5	3	.....	2	319½
Casgrain	Algoma	T. V. Anderson, Hearst.	548	4	1	252	1	148
Eilber	"	"	160	1	5	731	.....	.....
Hanlan	"	"	1,307	9	5	765	1	196
Kendall	"	"	599	4	82	12,819	4	537
Lowther	"	"	875	6	.....	.....	.....	.....
Forbes	Thunder Bay.	W. A. Burrows, Port	654½	5	2	322	.....	.....
Lyon	"	Arthur	1,046½	6	9	1,784½	6	867
Nepigon	"	"	401	3	1	317½	4	615
Aweres	Algoma	E. Noble, Sault Ste. Marie	.....	.....	.....	.....	1	116
Tarentorus .....	"	"	.....	.....	1	160	.....	.....
Vankoughnet .....	"	"	.....	.....	3	615	.....	.....
Watten	Rainy River..	C. J. Hollands, Fort Frances	.....	.....	.....	.....	.....	.....
Bright	Algoma	Thos. Dodds, Thessalon.	.....	.....	.....	.....	1	154
Day	"	"	431	.....	1	309	1	110
Gladstone .....	"	"	.....	.....	.....	.....	.....	.....
Haughton	"	"	144	1	.....	.....	.....	.....
Johnson .....	"	"	.....	.....	.....	.....	.....	.....
Kirkwood	"	"	147	1	.....	.....	.....	.....
Parkinson	"	"	480½	3	.....	.....	.....	.....
Patton	"	"	160	1	2	238½	1	160
Rose .....	"	"	.....	.....	1	157	2	312
Striker .....	"	"	.....	.....	1	62	.....	.....
Wells	"	"	2	1	.....	.....	.....	.....
Hallam	Sudbury	R. W. Teasdale, Massey	161	1	.....	.....	1	80
Harrow	"	"	612	5	.....	.....	3	308
May	"	"	587	6	.....	.....	3	483½
Salter	"	"	357	4	.....	.....	3	411
Shedden	Algoma	"	160	1	.....	.....	.....	.....
Victoria .....	"	"	.....	.....	.....	.....	1	80
Dowling	Sudbury	J. K. MacLennan, Sud- bury	79	1	.....	.....	7	324
Scollard	Nipissing	J. A. Philion, Sturgeon	160	1	.....	.....	1	161
Mason	"	" Falls	.....	.....	.....	.....	.....	.....

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Hugel	Nipissing	John Brown, Markstay.	160	1				
Widdifield	Nipissing	W.J. Parsons, North Bay	1,755	11	4	640	6	940
Nairn	Sudbury	Edward Arthurs, Espanola	391½	3			1	167
Admaston	Renfrew	Unattached	90	1			3	240
Bagot	"	"	300	3			1	100
Blithfield	"	"					1	190
Bromley	"	"					2	480
McNabb	"	"	50	1				
Stafford	"	"					1	100
Westmeath ..	"	"	100	1			1	100
Alfred	Prescott	Unattached						
Adolphustown.	Lennox	Unattached						
Anglesea	"	"	200	2			1	225
Efingham	"	"	102	2			3	117
Kaladar	"	"					2	425
Sheffield	"	"					1	200
Artemesia	Grey	Unattached					1	16½
Bentinck	"	"					5	439½
Egremont	"	"					4	355
Gleneig	"	"					3	395
Holland	"	"					3	257
Normanby	"	"					2	183
Osprey	"	"					2	209
Proton	"	"	47	1			1	99
Sullivan	"	"					4	450
Sydenham	"	"					1	100
Arran	Bruce	Unattached						
Brant	"	"					2	152
Bruce	"	"					3	250
Culross	"	"					1	125
Elderslie	"	"					8	634
Greenock	"	"						
Huron	"	"						
Kincardine ..	"	"					1	
Saugeen	"	"					1	25
Barrie	Frontenac ...	Unattached	100	1			1	100
Bedford	"	"					1	1
Kennebec	"	"						
Olden	"	"	115½	1			1	115½
Bathurst	Lanark	Unattached						
Beckwith	"	"					2	200
Elmsley	"	"						
Lanark	"	"						
Plantagenet ..	"	"						
S. Sherbrooke ..	"	"					1	400
N. Sherbrooke.	"	"						
Sandwich, E..	Essex	Unattached					1	87
Sandwich, W..	"	"					1	100 80 100
Seymour	N'thumberl'd.	Unattached						

Appendix No. 15.—Continued.

Township.	District or County.	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. of patents issued.	No. of acres patented.
Carden	Victoria	Unattached .....	.....	.....	.....	.....	1	106½
Dalton .....	" .....	" .....	.....	.....	.....	.....	1	164
Digby .....	" .....	" .....	.....	.....	.....	.....	2	487
Laxton .....	" .....	" .....	.....	.....	.....	.....	1	102
Somerville....	" .....	" .....	.....	.....	.....	.....	1	201
Edwardsburgh	Grenville	Unattached .....	.....	.....	.....	.....	.....	.....
Dummer.....	Peterborough	" .....	.....	.....	.....	.....	1	50
Harvey	Peterborough.	Unattached	97½	1	.....	.....	2	194½
Haughton.....	Norfolk	Unattached .....	.....	.....	.....	.....	.....	.....
Hungerford ...	Hastings.....	Unattached	100	1	.....	.....	2	200
Tudor	"	"	166½	2	.....	.....	5	301
Trafalgar	Halton .....	" .....	.....	.....	.....	.....	3	8
Rama	Ontario	Unattached .....	.....	.....	.....	.....	1	341
Cornwall.....	Stormont....	Unattached .....	.....	.....	.....	.....	2	196
Roxborough...	" .....	" .....	.....	.....	.....	.....	1	152
Matchedash...	Simcoe	Unattached	100	1	.....	.....	1	80
W.Gwillimbury	" .....	" .....	.....	.....	.....	.....	1	60½
Arthur	Wellington...	Unattached .....	.....	.....	.....	.....	1	100
Peel.....	" .....	" .....	.....	.....	.....	.....	.....	.....
Humberstone .	Welland	Unattached .....	.....	.....	.....	.....	4	263
Wainfleet.....	"	"	31	1	.....	.....	1	31
Maisonville...	Temiskaming.	Unattached .....	.....	.....	.....	.....	20	638
Allen	Sudbury	Unattached	12	1	.....	.....	1	12
Bigwood .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Burwash .....	" .....	" .....	.....	.....	.....	.....	1	176½
Dennison .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Drury .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Dryden .....	" .....	" .....	.....	.....	.....	.....	2	160
Falconbridge .	" .....	" .....	.....	.....	.....	.....	.....	.....
Gough	"	"	328	2	.....	.....	.....	.....
Graham .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Levack .....	" .....	" .....	.....	.....	.....	.....	5	196
Lorne	"	"	600	4	.....	.....	4	600
Louise	"	"	298½	2	.....	.....	2	298½
MacLennan ...	"	"	231	2	.....	.....	.....	.....
Snider .....	" .....	" .....	.....	.....	.....	.....	2	95
Waters .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Badgerow ...	Nipissing	Unattached .....	.....	.....	.....	.....	4	531
Bastedo .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Crerar .....	" .....	" .....	.....	.....	.....	.....	2	219
Field .....	" .....	" .....	.....	.....	.....	.....	2	2
Gibbons	"	"	160	1	.....	.....	1	160
Drayton	Kenora	Unattached	67½	2	.....	.....	2	67½
Malachi	"	"	5	1	.....	.....	1	5
Redditt .....	" .....	" .....	.....	.....	.....	.....	1	17¾
Chesley.....	Algoma	Unattached .....	.....	.....	.....	.....	2	80½
Cobden	"	"	164½	1	.....	.....	1	164½
Gould .....	" .....	" .....	.....	.....	.....	.....	.....	.....
Pic	Thunder Bay	Unattached .....	.....	.....	.....	.....	2	70

Appendix No. 15.—Concluded.

Township.	District or County	Agent.	No. of acres sold.	No. of pur- chasers.	No. of sales cancelled.	No. of acres resumed.	No. patents issued.	No. of acres patented
Townsite								
Armstrong..	Temiskaming.	Unattached					1	$\frac{1}{2}$
Grant .....	"	" .....	.45	5			2	$2\frac{3}{4}$
MacFarlane.	Kenora	" .....	.23	1			3	
Sioux Look- out	"	"					4	$1\frac{1}{2}$
Dryden	"	"						$\frac{4}{4}$
Winnipeg River Crossing..	"	" .....	.25	1			3	$1\frac{1}{2}$
Hearst	Algoma.....	T. V. Anderson					8	$2\frac{1}{2}$
Hilton	"	W. E. Whybourne, Marksville	16.	1			1	33
Capreol	Sudbury	Unattached					1	$\frac{91}{100}$
Gowganda....	Temiskaming.	"			11	$\frac{1}{2}$		
Iroquois Falls	"	F. E. Ginn, Matheson..					2	$\frac{61}{100}$
Kirkland Lake	"	Unattached.....	.1 ^c	1				
Muskokaville.	Muskoka.....	J.B. Brown, Bracebridge	.2 ^c	1				
Inverhuron ..	Bruce.....	Unattached.....					1	$52\frac{1}{2}$
Amherstburg..	Essex.....	"					2	$\frac{3}{4}$
Eugenia	Grey	"	$1\frac{1}{2}$	1			1	$1\frac{1}{2}$
Petewawa....	Renfrew.....	Finlay Watt, Renfrew.	$\frac{2}{3}$	2				
Barrie.....	Simcoe.....	Unattached					1	3
Holland Land- ing	York.....	"					1	4
WATER LOTS.								
City—								
Brockville ..	Leeds	Unattached.....	$\frac{7}{10}$	1			1	$\frac{7}{10}$
Kingston ...	Frontenac ...	"	$\frac{1}{4}$	1			1	$\frac{1}{4}$
Saltfleet.....	Wentworth ..	"	$3\frac{1}{4}$	9			9	$3\frac{1}{4}$
Ft. William.	Thunder Bay.	W. A. Burrows, Port Arthur	$21\frac{1}{2}$	2			2	$21\frac{1}{2}$
ISLANDS.								
Mason—								
Part Island C	Nipissing ...	J. A. Philion Stayner Falls	$9\frac{1}{2}$	2			2	$9\frac{1}{2}$
Rama—			4	1			1	$\frac{4}{4}$
Rama Island	Ontario	Unattached.....						
Bedford in—								
Wolf Lake..	Frontenac ...	"	1	1			1	1
Effingham—								
Island A ...	Lennox and	"	15	1			1	15
Crosby—	Addington.	"						
Island G ...	Leeds	"	$\frac{1}{2}$	1			1	$\frac{1}{2}$
Lansdowne—								
Dominion Is- land	"	"	$2\frac{1}{5}$	1			1	$2\frac{1}{5}$
Total			50,733	386	295	45,027 $\frac{1}{2}$	422	36,900

Number of lots assigned.....22

Number of sales restored.....19

W. R. LEDGER, Sales Clerk.

W. C. CAIN, Chief Clerk in Charge.

Number of acres assigned.....2820

Number of acres restored.....3107

ALBERT GRIGG,

Deputy Minister of Lands and Forests.

Appendix No. 16.

Statement of Crown Surveys completed and closed during the twelve months ending October 31st, 1918.

No.	Date of Instructions.	Name of Surveyor.	Description of Survey.	Amount Paid.	No in Acres.
1	April 20, 1915	Lang & Ross ...	Survey of Islands on the north shore of Lake Huron and Georgian Bay, Districts of Manitoulin and Parry Sound	\$ c.	
2	July 13, 1917	D. J. Gillon	Survey of Namakan River, District of Rainy River	3,690 10	
3	July 24, 1917	J. L. Morris	Survey of the Township of Kapuskasing, District of Algoma	569 47	
4	Oct. 30, 1917	David Beatty ...	Re-survey of the Township of O'Brien, District of Algoma	2,094 47	51,444
5	Oct. 19, 1917	H. M. Anderson ..	Re-survey of the Township of Owens, District of Timiskaming.	1,335 35	52,062
6	Oct. 24, 1917	J. S. Dobie	Survey of the Township of Idington, District of Algoma	3,988 20	51,920
7	May 12, 1918	Jas. Hutcheon ..	Examination of Cadwell Water Lot on Lake Erie	7,255 13	51,959
8	Jan. 26, 1918	S. B. Code	Survey of Islands in Rideau Lake within the limits of Lot 14, Concession I, Township of Burgess..	62 47	
9	Jan. 26, 1916	McAuslan & Anderson	Survey of Peter Long Lake, in the Districts of Timiskaming and Sudbury	138 00	
10	May 12, 1918	Jas. Hutcheon ..	Examination of Cadwell Water Lot on Lake Erie. Expenses of J. J. Newman	318 18	
			Aikenhead Hardware Co., boom chains and wire	47 15	
				7 15	
				19,505 67	207,385

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 17.

Statement of surveys in progress during the twelve months ending October 31st, 1918.

No.	Date of Instructions.	Name of Surveyor.	Description of Surveys.	Amount Paid.
				\$ c.
1	Sept. 7, 1917	A. L. Russell ...	Survey of the shores of low Shebandowan Lake, District of Thunder Bay	392 50
2	June 17, 1918	Phillips & Benner	Survey certain boundaries of the Black Sturgeon River Pulp and Timber Limit, District of Thunder Bay	4,305 00
3	April 20, 1918	H. J. Beatty	Survey of certain outlines of townships, District of Timiskaming	2,598 75
4	May 20, 1918	David Beatty ...	Survey of the Township of Williamson, District of Timiskaming	5,334 00
5	June 14, 1918	E. R. Bingham ..	Survey certain base and meridian lines, District of Thunder Bay	3,441 37
6	June 26, 1918	Lang & Ross	Survey of the Township of Cumming, District of Algoma	5,250 00
				21,321 62

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 18.

Statement of Municipal Surveys for which instructions issued during the twelve months ending October 31st, 1918.

No.	Name of Surveyor.	No	Date of Instructions.	Description of Survey.
1	W. A. & W. H. Brown	716	Feb. 14, 1918	To survey the road allowance between lots Nos. 10 and 11, in the third concession, Township of East Gwillimbury, County of York, and to mark the limits of said road allowance by durable monuments on the ground.
2	S. B. Code ...	717	June 4, 1918	To survey the road allowance between concessions 5 and 6, in the Township of Goulburn, across lots 16, 17 and 18, and that stone or other durable monuments be placed to mark the limits of the said road allowance.
3	George Ross ..	718	July 8, 1918	To survey the sideline road allowance between lots 8 and 9 through the whole breadth of the Township of Crowland, in the County of Welland, and also the side road allowance between lots 16 and 17 across the 6th concession of said township, and that stone or other durable monuments be placed to mark the said road allowance
4	Roger M. Lee..	719	Oct. 22, 1918	To survey the original road allowance between lots 13 and 14, in the 1st concession of the said Township of Wainfleet, in the County of Welland, and that stone or other monuments be planted to mark the position of said road allowance at the intersection with the road allowance between the 1st and 2nd concessions, and at different points to the lake shore

L. V. RORKE,
Director of Surveys.

ALBERT BRIGG,
Deputy Minister of Lands and Forests.

Appendix No. 19.

Statement of Municipal Surveys confirmed during the twelve months ending
October 31st, 1918.

No.	Name of Surveyor.	No.	Date of Instructions.	Description of Surveys.	Date when confirmed under R.S.O. 1914, Chap. 166, Secs. 10-15 inclusive.
1	MacKay, MacKay & Webster	7477	April 21, 1915	To survey the westerly part of the Toronto and Hamilton Highway	Jan. 22nd, 1918
2	Oliver Smith ...	711	May 30, 1917	To survey the concession road allowance between concessions 4 and 5 in the Township of Verulam across lot No. 5 and that stone or other durable monuments be placed at the front angles of lot No. 5 in the 5th concession	
3	E. D. Bolton ...	715	Sept. 21, 1917	To survey the road allowance between lots 10 and 11, across concessions 9 and 10, in the Township of Egremont, in the County of Grey, and to plant stone or other durable monuments to mark the boundaries of said road allowance	July 10th, 1918 July 22nd, 1918

L. V. RORKE,
Director of Surveys.

ALBERT GRIGG,
Deputy Minister Lands and Forests.

Appendix No. 20.

SURVEY OF THE TOWNSHIP OF KAPUSKASING, DISTRICT OF ALGOMA.

PEMBROKE, March 20th, 1918.

SIR,—I have the honor to submit the following report on the survey of the Township of Kapuskasing, in the District of Algoma, in accordance with instructions dated July 24th, 1917.

The Canadian Northern passes through this township, crossing the eastern boundary in concession four it runs in a north-westerly direction, crossing the Nemegosenda and Kapuskasing Rivers, and skirting the north end of Kapuskasing Lake it crosses the west boundary in concession ten, there being one station in the township named Agate, about thirty chains from north-west corner of the lake, but no accommodation exists at present for freight or passengers.

I commenced my survey in the latter part of August, 1917, by retracing the south boundary from south-east corner westerly, this was run by O.L.S. Niven in 1899, but owing to a bush fire having run through that section in the fall of that year, it was impossible to follow same in places and I had to cut out a new line for the first five miles. On the remainder of this boundary, excepting in swamps, the second growth was so thick that a line had to be re-cut before it could be chained and posted. The north boundary was run by O.L.S. Beatty, in 1912, and nearly all of this had also to be re-cut before we could post it. Chaining westerly along the south boundary I made each lot twenty-five chains and twenty-five links in width, and after making the proper allowance for roads, the meridians were run north astronomically, from this boundary, in the centre line of road allowance between lots six and seven; between twelve and thirteen; between eighteen and nineteen and between twenty-four and twenty-five; the concession lines were run west astronomically as chords of latitude, from the points determined upon on the east boundary between concessions two and three; between four and five and between six and seven; the other two concession lines were run east and west from points established on side line between lots six and seven. The survey was carried out in accordance with instructions; substantial wooden posts being planted at all lot corners and at all intersections of surveyed lines with road allowance along the rivers, lakes and right-of-way of the railroad; wooden guide posts being planted in centre line of road allowance, iron posts being planted where instructed. The field notes show result of survey in detail. The intersections of all surveyed lines with centre line of railway were carefully noted and sufficient measurements taken to accurately locate the centre line of railway right-of-way.

A careful traverse was made of Nemegosenra River and of Kapuskasing Lake and River, and ties made to the islands in the lakes and posts marked thereon. An allowance for road one chain in perpendicular width was laid out on both sides of above mentioned rivers and around the lake, also around the north side of small lakes on the south boundary on lots fourteen and fifteen. All lines were well cut and blazed, bearing trees being taken for all posts at lot corners. Frequent observations for azimuth were taken.

Generally speaking this township is covered with a thick growth of timber, principally spruce from four to nine inches in diameter, with scattered areas of poplar, balsam, white birch, and cedar varying in size from five to fifteen inches in diameter, there being a thick growth of underbrush throughout the township, making the cutting of lines very heavy. Prior to the construction of the railway

there were scattered areas with spruce from fifteen to twenty-four inches in diameter, but this was practically all removed for railroad construction purposes.

Along the Nemegosenda River the banks are low with marshes extending from five to twenty chains back, the subsoil being clay, along the Kapuskasing the banks are a little higher, but both streams overflow their banks for considerable areas during the spring freshet. Kapuskasing Lake is very shallow with a hard clay bottom, the banks being mostly low; and are flooded in a great many cases during high water. The railway crosses a small bay in northwest corner of the lake on a trestle about fifty chains long, and nearly all the piles for a trestle were driven across the bay in the north-east corner of the lake, but for some reason this was abandoned and the railway diverted to the north. Owing to the lake being so shallow, it is very rough during wind storms, which are of frequent occurrence and detract from the value of this lake as a summer resort. The water in the lake is usually of a muddy color, and fish can only be taken by nets; there being a plentiful supply of white fish, pike and pickerel.

A small Indian village, with shacks, occupied by six or seven families, is situated on lot eleven, concession seven, south of the railway, and I understand Indians have been living on this point for about eighty years. They of course trap and hunt in the winter and obtain a bountiful supply of moose meat along the rivers in the summer.

The surface is mostly level and swampy with occasional ridges which seldom rise to a height of more than fifty feet above the lake level, the north-west corner being somewhat broken, with Mount Horden situated on lots twenty-five and twenty-six, concession eleven, on which fire rangers have built one of their look-out stations, from which I understand a very extensive view is obtained, this being one of the land marks of this section.

Owing to the greater portion of the township being swampy with deep moss, and the ridges being mostly sandy loam, I do not consider it is suitable for agricultural development, its chief asset being timber suitable for pulpwood; the best land noticed was on line between concessions eight and nine, lots one to six inclusive, and on line between concessions two and three, lot nineteen to twenty-eight. Between Nemegosenda River and Kapuskasing Lake the land is mostly wet and swampy, the same may be said of that portion north of the railway and west of Kapuskasing River, while that portion south of the railway and west of the lake is about half swamp and half rolling; with drainage it might turn out good agricultural land, but I do not consider that more than thirty per cent. of the township is suitable for agricultural purposes.

No economic minerals are noted and there are no sites for water powers.

Accompanying this report are a general plan, timber plan, field notes including traverse sheets, the customary affidavits and account in triplicate.

I have the honour to be, Sir,

Your obedient servant,

(Signed) J. L. MORRIS,

Ontario Land Surveyor.

The Honourable the Minister of Lands, Forests and Mines,
Toronto, Ontario.

*Appendix No. 21.**Re-Survey of the Township of O'Brien, District of Algoma.*

PARRY SOUND, February 21st, 1918. ..

SIR,—I have the honour to submit the following report on the re-survey of the Township of O'Brien, in accordance with your instructions, dated August 30th, 1917.

This township was surveyed under the nine-mile system, by O.L.S. Fullerton, 1913, and his report, dated April 11th, 1914, which is now on file in your Department, so fully describes the township that it is not necessary for me to go into it in detail, he having run all the side lines and concession lines would have a better opportunity of reporting on the natural resources of this township than I have, seeing that I only ran certain concession lines. Suffice it to say that I consider this township the best I have yet seen in Northern Ontario.

The experimental farm on the west side of the Kapuskasing River, adjoining the Transcontinental Railway, fully demonstrates the splendid quality of the soil for agricultural purposes. A fair sized town is in the making on the east side of the Kapuskasing River, adjacent to the railway, for the housing of returned soldiers, who were busily engaged in preparing land for settlement.

Practically all of the larger timber has been removed for railway and construction purposes, the Kapuskasing and Woman Rivers affording convenient means of getting this timber to the railroad. What is now standing is suitable for pulpwood and fuel only. That suitable for pulpwood I found mainly in the north and south portions of the township, that in the centre of the town being mainly smaller timber from three to six inches in diameter.

My field notes are prepared from survey made by me of the lines between Concessions 2 and 3, 4 and 5, 8 and 9, 10 and 11, 14 and 15, 16 and 17, and the field notes of Concession 6 and 7, 12 and 13, are copied from those of Mr. Fullerton's, the only alterations I had to make being the changing of the markings of the posts due to the new numbers of the concession lines. The field notes I am returning of the side lines have been compiled from Mr. Fullerton's field notes, the depths of the concessions being obtained by chaining, from the intersection of the concession lines run by me with the side lines run by Mr. Fullerton, to the nearest post planted by him. The blank lines between Concessions 3 and 4, Concessions 9 and 10, and Concessions 15 and 16, were run in the original survey by Mr. Fullerton as concession lines between Concessions 2 and 3, 6 and 7, 10 and 11 respectively, and on these lines I destroyed his posts, but they now mark the blank lines between the concessions above enumerated, posts being planted by me at their intersection with the side lines. Posts along the Transcontinental Railway planted by Mr. Fullerton from Lots 1 to 12 inclusive were destroyed by me, as this part of the railway is not now the front of a concession.

A sufficient number of observations were taken to check the bearings of the lines, and the field notes of the lines run by me show the results of the survey in detail. The plan accompanying this report has been compiled from my survey notes and from Mr. Fullerton's plan and field notes.

Game does not appear to be very plentiful. Moose trails were noticed in the north-east corner of the township around Lily Lake. The only evidence of fur-

bearing animals was a couple of beaver dams. Owing to this survey having been performed in the late fall, I am not able to state anything about fishing.

Accompanying this report are a general plan, field notes, the usual affidavits and account in triplicate.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

(Signed) DAVID BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ontario.

Appendix No. 22.

SURVEY OF THE TOWNSHIP OF OWENS, IN THE DISTRICT OF TIMISKAMING.

NORTH BAY, February 9th, 1918.

SIR,—In accordance with instructions from your Department, bearing date of October 19th, 1917, I have made a re-survey of the Township of Owens, in the district of Timiskaming, the field work being completed on the 28th day of November following the date of instructions.

The township of Owens was originally subdivided by O.L.S. Bingham in 1915, and under these instructions the township was to be resubdivided into lots of about 99.8 acres each, as against the former subdivision of 150 acres per lot. To do this, the former lines were to be adhered to, while what was formerly two concessions was to be subdivided into three concessions, thus involving the adhering to certain of the former concession lines, obliterating others, and opening certain new ones. The following report is submitted as to the work done.

The lines between Concessions 3 and 4, 9 and 10 and 15 and 16 were run and posted in the original survey and, as these are now blind lines in the new survey, all the posts on these lines were removed and destroyed, and their accompanying B.T.'s destroyed. New posts were planted on these lines at the east and west sides of the side road allowance.

The lines between Concessions 6 and 7 and 12 and 13 were also run and posted in the former survey, and, as these lines are being adhered to, the original posts thereon were recarved to show the new concession numbers. Similar treatment was given to the original posts on the south and north boundaries of the township, and on these lines common to both surveys the fronts of Lots 28 were chained, and posted midway to divide Lot 28 into Lots 28 and 29.

The new concession lines cut were those between Concessions 2 and 3, 4 and 5, 8 and 9, 10 and 11, 14 and 15, and 16 and 17. These were run in pairs as follows:—

The first mentioned two were run westward through the township from the east boundary, the second two were run west and east from the 25th side line, while the third pair were run west from the east boundary. The side lines were not re-chained throughout their length, the block depths as per the former survey being assumed correct. A chainage was, however, made at each side line to ascertain the depth between the new concession lines, and those of the former survey being abandoned. The survey was thus fairly well under control, though, as stated, no re-chainage was made to prove the correct residuary depths along the side lines.

On the north boundary of the township it was found that there had been no post planted, at nor-west of the 18th side line, by the surveyor in his original subdivision, and so this portion of the boundary was opened out and posted. It was also found that, on the north boundary, the original stakes marking the north-east angles of Lots 16, 17, 18 were, in each case, 10 chains too far east, and these errors were corrected.

Iron posts were planted, at certain specified positions throughout the township, and these positions are indicated both on the plan and in the field notes.

In the field notes returned you will observe that for all the lines save those newly cut, the notes of O.L.S. Bingham have been copied for topography as well as chainage and bearings; while full original notes are included for the new work performed by my party.

The lines were well cut out and thoroughly blazed, bearing trees clearly scribed, and full-sized posts firmly seated.

GENERAL FEATURES.

The township of Owens will be found to lend itself very naturally to farming, there being fully 90 per cent. of the land well drained and tillable, and the soil of a loose texture clay loam. There are no rough nor rocky areas, the other 10 per cent. of the area being, for the present, rather wet. There are numerous small streams cutting through the township, and two branches of the Lost River in the north-west quarter of the township are quite fair sized rivers. The Kapuskasing River flows northerly through the south-east corner of the township, and these streams will render much aid to the transporting of pulp wood to the track of the National Transcontinental Railway, which traverses the north-east corner of Owens.

TIMBER.

The timber burden is almost entirely spruce, some few large whitewood occurring on certain of the uplands. Along the streams the white spruce attain at times to a butt measurement of 20 inches, while inland the timber is of good commercial size for pulp wood.

MINERALS.

No exposed rock was encountered during the progress of the survey, and no economic minerals are known to exist within the limits of the township.

Accompanying this report are the usual returns, consisting of plan and tracing, field notes, etc., etc., all of which is respectfully submitted,

I have the honour to be, Sir,

Your obedient servant,

(Signed) H. M. ANDERSON,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 23.

SURVEY OF THE TOWNSHIP OUTLINES ON THE SOUTH SIDE OF UPPER ABITIBI
LAKE, IN THE DISTRICT OF TIMISKAMING.

PEMBROKE, September 28th, 1918.

SIR,—I beg to report that I have completed survey of township outlines on the south side of Upper Abitibi Lake, in the District of Temiskaming, under instructions from your Department, dated April 20th, 1918, and beg to submit the following report.

I left the Transcontinental Railway at Low Bush and proceeded by boat to the mouth of the Ghost River, and proceeded up that river by canoes to trail from McCool Creek to the east boundary of Indian Reserve, which I followed to posts at the south-east corner of Reserve planted by J. H. Shaw, O.L.S., from this point I ran south, a distance of thirteen chains and sixty-eight links, and then ran my base line east a distance of two miles, seventy-nine chains and twelve links, where I planted $1\frac{3}{4}$ -inch iron bar and spruce post establishing corner of Rand, Garrison, Harker and Lamplugh townships, from this my first meridian was run south to Newman's base line and north to the Abitibi Lake. I then continued my base line east to intersection of production of line between Harker and Holloway townships, moving Newman's iron post north a distance of thirteen chains and sixty-three links and planting it along side spruce post in cairn of stones marking the corner of Lamplugh, Harker, Holloway and Frecheville townships, from this post by second meridian was run north astronomically to Abitibi Lake. I then continue by base line east to the boundary line between Ontario and Quebec, intersecting same at a distance of thirty-two chains and eighty-five links north of the sixty-seventh mile post, where I planted $1\frac{3}{4}$ -inch iron bar alongside spruce post in pile of stones. I then proceeded to the corner of Tannshill and Dokis townships, on Newman's base line, and ran my third meridian north to intersection with my base line, where I planted $1\frac{3}{4}$ -inch iron bar alongside spruce post marking corner of Frecheville, Holloway, Marriott and Stoughton townships, and

continued this meridian north to the south side of Abitibi Lake, where I planted 1¾-inch iron bar along side spruce post, at a distance of thirty links from high water mark.

Along the base line forming boundary of Rand and Garrison townships the soil is of good clay, fairly level, suitable for agricultural purposes, timbered with spruce and balsam from 4 to 12 inches in diameter with some white birch and poplar in places, and similar conditions prevail along base line between Lamplugh and Harker townships as far as Ghost River, after crossing which the ground is rolling and rising to the foot of Ghost Mountain, the latter being crossed just south of its summit at an elevation of about six hundred feet above lake level. The base line continues through a broken, hilly country, with frequent rocky knolls unsuitable for agricultural purposes, the timber being principally white birch, spruce and balsam, with thick alder underbrush, till we reach the corner of Lamplugh, Harker, Holloway, and Frecheville townships, which is situated about the south-west corner of Lightning Mountain, continuing along the base line forming boundary between Frecheville and Holloway townships, the country is rolling and broken with frequent outcrops of rocky knolls from thirty to one hundred feet high, timber being principally white birch up to fifteen inches in diameter, with spruce, balsam and poplar prevailing in the level areas between ridges where soil is mostly clay; continuing along the boundary between Stoughton and Marriott townships the land gradually improves for the first mile and a half until we enter a fairly level section of good clay soil extending to the inter-provincial boundary, timbered with balm of gilead, poplar, spruce and balsam, with very thick underbrush.

Along the first meridian forming boundary between Garrison and Harker townships from Newman's base line north for the first two miles the land is fairly level but sandy and stony in places, with low ridges from twenty to thirty feet high, higher ground being reached on the third and fourth miles, but falling again to where we cross what I think is main branch of Ghost River, the timber being principally spruce on lower levels with white birch and balsam predominating on higher land, and is not suitable for agricultural purposes. From branch of Ghost River north to my base line the soil is of good clay, suitable for agricultural purposes.

Along line between Rand and Lamplugh townships, after leaving base line, the land is rolling and sandy for a mile and a half till we approach Ghost River, along which the land is low and marshy in places to where meridian crosses river on the fifth mile, higher ground being met from there onward to Lake Abitibi.

Going north on second meridian between Lamplugh and Frecheville townships there is a sharp rise over the westerly end of Lightning Mountain and dropping at once over rough, rocky land to base of mountain about ten chains south of first mile post, the remainder of this meridian runs through fairly level land, marshy in places, adjoining Lightning River, which is crossed on the fifth mile, timber being principally spruce, with white birch and balsam on the higher ground.

Going north on the third meridian between Holloway and Marriott townships from Newman's base, the first mile is through level clay land with heavy growth of spruce and balsam, then we passed through rolling land with sandy ridges till we reached the base line, and continuing north along line between Frecheville and Stoughton we met with fairly good agricultural land, timber being chiefly spruce and balsam with scattered poplar, and crossed an old brûlé on the fifth mile.

From what I could see off the base line, the townships to the south appear to be broken and hilly with considerable areas of spruce swamp, and that to the north is not so broken. There appears to be some good land along Ghost River in Rand and Lamplugh Townships, and along the Matawasagi River in Stoughton. Taken as a whole the area covered by this survey is chiefly valuable for its spruce timber and has not sufficient good land to warrant development along agricultural lines.

No indications of economic minerals were found, but the rock formation and mineral resources were fully investigated this summer by the Department of Mines.

Ghost, Lightning and Matawasagi Rivers are all sluggish streams, the last mentioned being the largest and is navigable by boat of light draught for about four miles from Lake Abitibi. Ghost River is next in importance and is navigable by canoes for about a mile south of base line, it flows through a march, about three miles long and from twenty chains to one-half mile in width, in the south-westerly portion of Lamplugh Township.

Frequent observations for azimuth were taken and substantial wooden pile post planted, with $1\frac{3}{4}$ -inch iron bars properly marked alongside wooden posts at township corners and $\frac{1}{4}$ -inch bars at the three mile posts, the lines being well cut out and trees blazed.

Moose are very plentiful, but the fishing in rivers is not good as far as our experience went.

Accompanying this report are field notes, a general plan, and account in triplicate.

I have the honour to be, Sir,

Your obedient servant,

(Signed) HERBERT J. BEATTY,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 24.

SURVEY OF THE TOWNSHIP OF IDINGTON, IN THE DISTRICT OF ALGOMA.

THESSALON, June 1st, 1918.

SIR,—In accordance with your instructions, dated October 24th, 1917, I have made a survey of the Township of Idington, in the District of Algoma, and beg to submit the following report.

This township is bounded on the east by the Township of Williamson, at present unsurveyed, on the west by the Township of McCrea, which was sub-

divided some years ago, on the north by the unsurveyed Township of Neely, and on the south by the unsurveyed lands of the Crown. The north boundary of this township was run in 1900, being part of the base line run by O.L.S. Niven in that year. The east, west and south boundaries were run in 1906 by O.L.S. Niven.

The Township of Idington was surveyed into lots of 100 acres or thereabouts, the dimensions of the regular lots being 25.25 chains frontage by 39.60 chains in depth. There are 18 concessions, and 28 lots in each concession, lot 28 being wider than the other lots. A road allowance one chain in width was surveyed between every second concession, that is between concessions 2 and 3, 4 and 5, 6 and 7, etc., the line being run in the centre of the road allowance. Similar road allowances were also surveyed between Lots 6 and 7, 12 and 13, 18 and 19, 24 and 25, the side lines being run in the centre of the road allowances.

The survey was started on November 4th, the party having arrived at Harty station, on the National Transcontinental Railway, the night previous. The south-east corner was located, this point being marked by an iron post planted by O.L.S. Niven, and a distance of 80.20 chains was measured northerly along the east boundary, from this iron post, to the centre of the road allowance between Concessions II and III. This gave to each concession a depth of 39.60 chains and allowed for half the width of the road allowance on the south boundary, and on the front of Con. II. At this point an observation was obtained on Polaris, which showed O.L.S. Niven's meridian to be correct. From this point a line was run westerly on a nine-mile cord, down the centre of the road allowance between Concessions II and III, to the centre of the road allowance between Lots 6 and 7, giving each lot a frontage of 25.25 chains, and leaving half the width of the road allowance along the east boundary. The side line between Lots 6 and 7 was run south to the south boundary and then north across the township to the north boundary of the township. This line was used as the base for the survey, all concession lines being started from it and run east to the east boundary, and west to the west boundary.

Each concession line was run as a nine-mile chord, and the side lines were run as true meridians. All the lines were run with a transit, and observations were taken on Polaris every clear afternoon. For this purpose a sidereal watch was carried, and the astronomical tables supplied by the Department of the Interior were used and found to be of great assistance.

Excepting for the fact that the regular concessions are of a depth of 39.60 chains instead of 59.50 chains the township was surveyed in a manner similar to the other nine-mile townships in the Clay Belt. The posts marking the corners of the lots are planted 50 links from the line run down the centre of the road allowance, and a guide post was left on the line opposite the corner at the front of each lot, and at the point where the side and concession lines intersected. These posts were all of the most durable wood obtainable, and were carefully marked with a scribing iron. Bearing trees were marked and noted in the field notes wherever possible.

A road allowance one chain in width was laid off along the shore of every lake encountered during the survey and also along each bank of the Opazatika River. A similar road allowance was laid off on each side of the National Transcontinental Railway.

The Opazatika River, and the above mentioned lakes were all traversed on the ice, by transit and chain, and the details of the traverses are shown in the field notes.

In order to make the survey more permanent, 25 iron posts were planted, in addition to iron posts planted on previous surveys. The iron posts are each $1\frac{1}{4}$ inches in diameter, and were planted at the following points:—

S.W. corner	Lot	12, Concession	I	S.W. corner	Lot	18, Concession	XI
S.W.	"	6	III	S.W.	"	28	XI
S.W.	"	18	III	S.E.	"	1	XIII
S.W.	"	28	III	S.W.	"	12	XIII
S.E.	"	1	V	S.W.	"	24	XIII
S.W.	"	12	V	S.W.	"	6	XV
S.W.	"	24	V	S.W.	"	18	XV
S.W.	"	6	VII	S.W.	"	28	XV
S.W.	"	18	VII	S.E.	"	1	XVII
S.W.	"	28	VII	S.W.	"	12	XVII
S.E.	"	1	IX	S.W.	"	24	XVII
S.W.	"	24	IX	N.W.	"	18	XVIII
S.W.	"	6	XI				

The lines are all well cut out and blazed, and every precaution taken to see that the instructions were properly carried out. As the survey was not completed until the end of January, difficulty was experienced in some cases, in getting the posts firmly planted in the ground. The chainmen carried a double-bitted axe, and a hole for each post was chopper below the frost line.

The Township of Idington, as a whole, should be a good one from an agricultural standpoint. It is conveniently located, as the National Transcontinental Railway runs through the middle of it from east to west, and there are two stations within the township. Harty station is near the east boundary, and Opazatika station is near the west boundary. The whole township is gently rolling or level clay land, resembling that in the best parts of the Clay Belt. The lower portions are rather swampy, being covered with deep moss which retains the moisture. There is a great deal of fairly high land, however, sufficiently rolling to afford natural drainage. The Opakatika River runs through the north-westerly portion of the township. The banks of this river are low, and the land for a distance of half a mile to a mile back from the river is very wet, and so low and flat that drainage will be very difficult. The line between Concessions 14 and 15 runs through low swampy country for almost its whole length, and the portions of the township most suitable for immediate settlement are south of this line and east of the Opazatika River. The timber plan accompanying this report shows this fairly well, as the approximate location of the swampy portions and of the higher lands are shown in colors. A considerable portion of this township has been burnt over. These portions are also indicated on the plan referred to. The north-westerly portion of the township was over-run by fire about two or three years ago, and the timber is now beginning to fall. The burnt areas near the railway were probably burnt over during the construction of the railway, and are now covered with an almost impenetrable mass of windfalls. In Concessions 1, 2 and 3 there are some burnt areas which are apparently the result of earlier fires, as the timber is nearly all down, and much of it rotted away, so that these portions could be easily cleared. These areas are probably extensions of the large brule which is reported to exist further to the south, where fire is said to have swept a very large area some years before the railway was built.

The township is well timbered with spruce and balsam on the low ground, and spruce, balsam, poplar and birch on the higher areas. A large part of this township appears to have been burnt over ninety years ago, and is covered with a matured second growth. This old burn is fairly distinct from the rest of the town-

ship, and may be said to consist of that portion of the township previously mentioned as being best suited for immediate settlement, although it is difficult to lay down any exact limit, as portions of the original forest exist within the limits of this area, and evidences of this old fire were seen along the north boundary of the township. The timber growth on this area is fairly thick, but with very little spruce over nine or ten inches in diameter. The timber, however, is long and straight, and of excellent quality for pulpwood, of which there is a very large amount. On this area there is not so much underbrush, and the moss is not so deep. On the large swamp areas previously mentioned, the timber is mostly small, and in some places very sparse, there being several large areas of open marsh, particularly along the Opazatika River.

The Opazatika River is the largest stream, being about three chains wide, and flowing with a gentle current. There are also a couple of good sized creeks on the easterly side of the township which probably flow to the Kapuskasing River. There are several small lakes, the largest being Bear's Tooth Lake, which is about three-quarters of a mile long, with low swampy shores. There is one small island in this lake.

Game was very scarce. A few moose were seen on the high ground north of Harty station, but rabbits and partridge were conspicuous by their absence.

Enclosed herewith you will find field notes, a general plan mounted on cotton, a timber plan on tracing linen, and accounts in duplicate.

All of which is respectfully submitted.

I have the honour, to be, Sir,

Your obedient servant,

(Signed) JAMES S. DOBIE,

Ontario Land Surveyor.

The Honourable, the Minister of Lands, Forests and Mines,
Toronto, Ont.

Appendix No. 25.

REPORT OF SURVEY OF LADY EVELYN LAKE.

TORONTO, 26th September, 1916.

SIR,—We have the honour to submit the following report on the survey of the Mattawapika River and Lady Evelyn Lake and Islands therein, in accordance with instructions from your Department, dated 6th January, 1916.

Preparations for the work were made upon receipt of the instructions, such as getting equipment made and supplies ordered and shipped to Latchford, but owing to the unfavorable weather conditions in January, starting the work was somewhat delayed. On 24th January we went to North Bay, Temagami, and Latchford, to make arrangements for men suitable for this kind of work, and arranged for the transportation of supplies.

The party was in charge of Mr. A. T. Ward, O.L.S. Two surveyor's assistants were taken from Toronto, and the other necessary helpers were engaged as near the locality as circumstances would permit. Having organized our party to start inland from Latchford, where we were joined by the Crown Timber Estimator and his assistant, from Sudbury, we started from there on 1st February, proceeding up Bay Lake and the Montreal River, as far as the dam on the Mattawapika River. We were able to take a freight team with our supplies and outfit to this point, where our survey proper commenced.

We commenced our survey from a post planted by O.L.S. Blair, in front of Lot 9, Concession 5, Township of Barr, distant thirty-two chains west from the south-east angle of that lot, fixing the position of the Mattawapika Dam. The traverse lines were measured on the ice and were as close to the shore as practicable. Numbered pickets were put out at every five chains for the use of the Timber Estimator. Offsets to the shore were measured from these pickets, and a contour line, ten feet above the water level, was noted. Some difficulty was met with, owing to certain parts of the Mattawapika River being open. This was overcome by stadia readings. Station pickets were put at angles in the traverse lines and numbered consecutively. All previously established township outlines and points which could be found were connected with our traverse lines, and in addition, such mining claims, both on the main land and islands, as could be seen, were noted and connected with our survey.

We continued our survey up the Mattawapika River and Lady Evelyn Lake, in the aforesaid manner, and completed the work at the Falls, being the outlet of the Diamond Lake, on the 1st of April. During the last week in March we had almost continuous rain, which greatly impeded the field work, and was the cause of an early opening up of the rivers and creeks, thus bringing about a sudden termination of our survey.

ISLANDS.

All islands were located and those of sufficient size to require it were traversed, and all were numbered consecutively from No. 1, with the prefix of the letter "E," in accordance with instructions. The designations of islands were marked on trees at prominent points. These trees were selected where possible above the contour line, also for their durability and prominence, and the description and position of each is shown in the field notes. In all, ninety-nine islands were surveyed, varying in size from one quarter of an acre to one hundred and eighty-five acres.

CONTOURS.

Prior to leaving Latchford, we ascertained the elevation of the Montreal River, as indicated by the Government bench mark on the dam at Latchford.

We painted a bench mark on the rock immediately above the dam on the Mattawapika River, at an elevation of 950 feet above mean sea level, based upon the Government datum as previously ascertained at Latchford. The water level of the river above the dam was found to have an elevation of 938.46 feet.

Ten foot contour lines were fixed accurately where the shores were rocky or gradually rising, but on certain parts of the Mattawapika River where large areas of low swampy land interspersed with ridges and knolls were found, compass traverse lines were run in the swamps and the contour lines located approximately.

To obtain absolute results would require a much longer time and a larger party than we had at our disposal.

TIMBER.

We did not go into details as to the timber affected, as this was attended to by an official from your Department.

WATER,

The area of the water in the Mattawapika River and Lady Evelyn Lake was found to be eighteen square miles and ninety-hundredths of a square mile. An additional area of seven square miles would be obtained should the waters be raised to the ten foot contour line, thus making a total twenty-five square miles and ninety-hundredths of a square mile .

In Willow Island and Suker Gut Lakes we have enlarged a geological map, scale four miles to the inch, to twenty chains to the inch, and find the area to be two square miles and ninety-three-hundredths of a square mile, but this is very approximate.

As before stated, we have no means of knowing to what extent this area would be increased by raising the water to the present contour line. By enquiry from the natives, we were informed that a considerable area of low land lies adjacent to these lakes.

The falls at the outlet of Diamond Lake was found to have an elevation of ten feet and two inches.

GENERAL REMARKS.

The sudden and early breaking up of winter interfered with a detail survey of Willow Island and Suker Gut Lakes, which we contemplated, and had made preparations for, on receiving verbal instructions from the Inspector of Surveys from your Department.

Since the construction of the Mattawapika Dam, what was formerly known as Willow Island Falls, is now reduced to small rapids. These rapids are at the outlet of Willow Island and Suker Gut Lakes, and at the extreme west end of Lady Evelyn Lake. We were unable to make a survey of these waters owing to the breaking up of winter, and cannot tell to what extent raising the water would affect these lakes.

In the vicinity of the north-east angle of the township of Dane there were several mining claims staked out, and we understood that there has been some development work done. On account of the depth of snow, it was impossible for us to find out if there were any veins or development work done, which would be affected by the raising of the waters another ten feet. We thought it well to call attention to this fact, in case a claim might be made for damages sustained.

By travelling early in the morning and overland through the woods, we reached Latchford on April 5th, where the party was paid off and disbanded.

Accompanying this report is a plan on tracing linen, on a scale of twenty chains to the inch, in four sections, showing the existing shore line at the present water level, with contour lines about ten feet above that level, and traverse lines and station numbers thereon; also field notes on departmental paper, showing the

astronomical courses and lengths of all traverse lines with offset distances to the shores and contour lines; and field notes showing traverse lines of all the islands, numbered consecutively.

We have the honour to be, Sir,

Your obedient servants,

(Signed) SPEIGHT & VAN NOSTRAND,

Ontario Land Surveyors.

The Honourable the Minister of Lands, Forests and Mines,
Parliament Buildings, Toronto.

Appendix No. 26.

TORONTO, January 22nd, 1919.

To the Honourable the Minister of Lands, Forests and Mines, Ontario.

SIR,—I beg to submit herewith a report of operations conducted by this Department under the Northern and Northwestern Ontario Development Act—Amending Acts, 1916 and 1918.

LOANS TO SETTLERS.

Up to October 31st, 1918, a total of 1,839 applications for loans have been received, asking for a total amount of \$699,755.00, an average of \$380.51 per application. These were given careful consideration, and in all cases where *bona fide* settlers have shown actual need of financial assistance this Department has been pleased to co-operate, providing existing improvements to land warranted an advance, and it was clearly demonstrated the money was to be used to advantage in improving the property, or the living condition of the settler and his family.

A total of 1,305 loans have been issued to settlers, amounting to \$407,286.00, the average loan being \$312.10, and the development noted throughout the various districts in the way of increased land under cultivation, improved buildings, and larger holdings of live stock, would clearly indicate that good use has been made of the loans received and that settlers have been able to devote more of their time to work on their own lots in clearing up land, but the scarcity and high cost of labour for this class of work considerably retarded advancement along this line. The higher price of building materials, and live stock, prevented the new settler from accomplishing much over and above the result of his own labour.

Repayment of loans has been very satisfactory, in spite of adverse weather conditions for harvesting in some districts. This is evidenced by the fact that 90 per cent. of the interest payments have been received, and payments on account of principal, through payment of some loans in full, equal 99 per cent. of payments due.

LOANS TO CREAMERIES, ETC.

While a number of enquiries have been made and considerable correspondence carried on, the only loan issued of this nature, has been to the Sudbury Co-operative Creamery Co., Ltd., in an amount of \$12,000.00. This was granted in July, 1918, and has apparently placed the institution on a good working basis; their operations having been carried on successfully during the year and the prospects are good for much better results in 1919, and consequently a greater benefit to the dairy industry, in the district served by the creamery. Other loans to creameries, cheese factories, and grist mills no doubt will be required, as there are a number pending, but matters are not yet in shape for the submission of formal applications.

In conclusion would direct your attention to attached detailed statement and would say that the general benefits derived by settlers from their ability to receive small loans from the Department on easy terms has often been expressed by individual settlers and is self evident from their improved conditions.

MEMORANDUM OF APPLICATIONS RECEIVED AND LOANS ISSUED
TO OCTOBER 31ST, 1918.

APPLICATIONS.

Number of applications received	1,840
Amount applied for	\$711,755 00
Average per application	\$380 51

LOANS.

Number of loans issued	1,306
Amount granted	\$419,286 00
Average loan	\$312 10
Total acreage covered by liens	200,254
Total acreage improved land	27,585

NOTE.—Figures, except averages, include application for and loan of \$12,000.00 to Sudbury Co-operative Creamery Co., Ltd.

REPAYMENTS.

Accrued interest due	\$25,282 38
Accrued interest received	22,683 23
Payments on principal due	29,315 48
Payments on principal received	29,020 63

Total amount of loans and accrued interest outstanding, \$392,864.52.

Yours very truly,

F. DANE,

Settlers' Loan Commissioner.

Appendix No. 27.

ALGONQUIN PARK, November 1st, 1918.

HONOURABLE SIR,—I beg to hand you my report for the fiscal year ending October 31st, 1918, under much happier conditions than my last report owing to the fact that the war that for years has been sapping the best life of the Empire is fast drawing to a victorious close.

We have had the usual staff of rangers, and they have been employed in various ways during the past year.

In November last you decided to have them take out a number of deer from the sections convenient to the railways, to be shipped to Toronto and other points to help out the meat supply. This was done, and several of our best men given the task of shooting and bringing to the railway the deer from different points. This represented a good deal of hard work, but our rangers did it creditably and some 650 deer were taken and shipped to Toronto and Hamilton. The net weight of the venison was 59,082 lbs., which sold for \$5,090.34. The deer were taken mostly from near headquarters, Joe Lake and Brulé Lake sections, a few coming from the Canadian Northern in the northern section of the Park. The venison found a ready market and was, I believe, much appreciated both in Hamilton and Toronto. It was also decided to take out a quantity of fur. This was done mostly by the same men who took out the deer and a fine lot was sold, bringing \$9,008.25. This was disposed of at public sale at the Parliament Buildings, Toronto, as usual, and was made up of beaver, otter, mink, marten, fisher and muskrat. As far as possible, the meat of the beaver, which by the way is excellent food, was saved and shipped to Toronto where it was in demand and brought a good price. Of this, 2,404 lbs. were shipped, the price received for which was \$240.40.

In the spring it was decided to take out a quantity of mullet from the lakes near headquarters, where they had become very numerous, much to the detriment of the better fish, and five tons were taken out and shipped, bringing \$129.20. I would recommend taking out a like quantity next spring from here and Joe Lake. The trout and bass are caught each year and the mullet left, with the result that they very much predominate and as they are spawn eaters they are under existing conditions a detriment.

It was also determined to take out a large quantity of hardwood in view of the fuel shortage, and in compliance with your instructions, camps were built, a drag-sawing machine and engine bought, and as many of the rangers as could be spared were allotted to this work. The wood was cut on one of the hardwood ridges west of Cranberry Lake and everything was cut, the brush and debris being well piled with a view to burning in the spring, when the whole will be cleaned up and seeded to hay for use of headquarters, etc. Several hundred cords of wood were cut by the rangers, when owing to the scarcity of men on the Grand Trunk Railway it was found necessary to detail our rangers to build the sidings required at several points in the Park for loading wood. This, of course, put a stop to the wood cutting. Three sidings were built, one at headquarters, one at Source Lake and one at Potter Lake, at both of which latter points the Government had given large contracts for taking out wood. By the time these sidings were completed, it was necessary for our men to return to their respective sections as the trappers had become busy, knowing the rangers were off their beats, and men

were hired to take their place in the wood-cutting camp and are continuing the work there.

I am glad to report there were no forest fires last year. Several were started along the railway, but with the telephone and the railway tank here at all times in readiness, they were gotten under control at once. The cleaning up along the railway also was a great assistance at these times, and no fires were allowed to reach the woods.

Owing to the fact that our rangers were otherwise employed, not many portages were cut or shelter houses built. One good shelter, however, was put up on the line of the Canadian Northern Railway near Francis Lake. There have not been any serious infringements of the law during the year, so far as the Park is concerned.

The old Indian, Francis Dufond, at Manitou lake died this fall, and I believe his old wife intends to move out to Mattawa as soon as the ice takes. This will leave the farm vacant, and as it is a rendezvous for the Indian trappers from Mattawa, I thought of stationing a ranger there. There are, as you are aware, a large clearing and several buildings on the farm, which belongs to the Government.

We have had a great many visitors to the Park, the Highland Inn and other hotels being filled to overflowing, and many had to be refused accommodation. They were mostly health seekers or parties who came for rest, many returned men among them who received genuine benefit from a stay here. With the war drawing to a close, we look for a return of our young men and sportsmen next year, who have been deterred from coming in the past on account of it.

A number of new leases have been granted and all the cottages on the lake were occupied. The boys' and girls' school camps, too, were filled up as usual, many of the parents staying at the Inn.

The Government did a lot of work on the road from headquarters to Big Island lake, and I trust this will be completed next year. It will be a stretch towards a trunk road through the Park, which will be a great convenience and afford much pleasure to visitors.

The fishing has been very good and some splendid trophies have been taken out by anglers. I hope some day to see a hatchery established here, not only to keep the Park waters replenished, but to supply the many lakes and rivers in the Province, especially to the east of the Park. A number of hybrids were taken this year, being a cross between the lake trout and the speckled trout, having the forked tail of the former and the red spots of the latter.

As there is likely to be a good demand for lumber of all kinds in the near future, I would strongly recommend some means being taken to manufacture the splendid hardwoods now mature on the limits acquired from the Munn people. There are vast blocks of the finest hardwood with an abundant growth of young timber coming on, and it would seem a great pity to let all this valuable timber decay and spread disease to the young growth. The woods would be benefited by a careful removing of the matured timber, and a large revenue could be derived from the same. The telephone line has proven a great benefit in many ways, especially in getting quickly to fires, also in the wood cutting operations, etc. It is a pity we cannot have further connection over the Bell line. At present we are confined to Orillia on the south and North Bay on the north. I am sorry to say work in this section, especially in the wood camps, has been very much handicapped by the outbreak of influenza, in some cases completely tying up the operations.

Game of all kinds is very abundant, and we expect a fine catch of furs during the coming winter and spring. Deer and moose are also plentiful, the number of the former taken out being from so small a section that it has had no effect whatever on the Park in general.

We have collected in rents here, \$467.50; for licenses, \$780.00; and for telephone, \$70.43, making a total of \$1,319.93.

These amounts do not include moneys paid direct to Toronto for rents, etc.

Yours very truly,

G. W. BARTLETT,

Park Superintendent.

*Honourable G. Howard Ferguson,
Minister of Lands, Forests and Mines,
Toronto, Ont.*

Appendix No. 28.

QUETICO PROVINCIAL PARK.

KAWENE P.O., ONT., OCT. 31ST, 1918,

SIR,

I beg to submit my report for the fiscal year ending October 31st, as follows:

I found it very hard to get suitable men for rangers, owing to the scarcity of labour and the unusually high wages paid for lumbermen, rivermen, etc.

During the season the fire-rangers on Quetico Park were a separate unit from the Park-rangers inasmuch as they were under a chief fire-ranger. Two small fires occurred during the season, one on the island in Lake La Croix. It ran over about 25 acres, but being a light surface fire did practically no damage. The other occurred about the time of the Minnesota fire on Marion bay, Basswood lake, but was confined to about eight acres covered with poplar, birch, etc. It seemed indeed at that time that it might be very serious, as the smoke from the Minnesota fires south and east of us was very dense.

During the summer I had built at Eva lake a boat-house and also a shelter for our wagon there. At headquarters I built a canoe shed of sided timber 14 by 22 ft. This affords ample shelter for canoes in winter and for sleighs, waggons, etc., in summer.

Repairs were made to huts on Lacroix and Basswood lakes. Owing to the gradual decay of the dam on the "Dawson trail" at the outlet of Pickerel lake built about fifty years ago, I found it necessary to build a dam on Deux Rivières, one of our main canoe routes, the water having become so low that it was nearly impassable. I had a road cut over-land from headquarters to the southwest corner of Eva lake, about $4\frac{1}{2}$ miles distant, thus avoiding two small lakes which occasioned us much trouble, as the ice used to become unsafe on them when still good on the larger lakes. Many other trails, portages, and canoe routes were cut and improved.

Game is very plentiful in the Park, red deer, partridge, and beaver particularly having increased very rapidly.

The larger lakes in the Park abound in fish such as trout, pickerel, whitefish and pike, and in my opinion a considerable quantity of these might be taken without any detriment to the lakes whatever, thus helping to relieve the food situation.

The Shevlin-Clarke Lumber Co. of Ft. Frances will no doubt operate largely on their limits in the Park this season. Their operations will be closely patrolled by competent rangers. I am pleased to say that the officers of this company co-operate heartily with us in the matter of Park regulations.

I am in receipt of many letters of regret from persons who intended to visit the park during the summer, but who owing to war conditions had to forego the pleasure.

I have the honour to be Sir,

Your obedient Servant,

HUGH McDONALD,

Superintendent.

HONOURABLE G. H. FERGUSON,

*Minister of Lands, Forests and Mines,
Toronto, Ont.*

Appendix No. 29.

COLONIZATION AND IMMIGRATION.

To the Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Toronto, Ontario:—

SIR,—I have the honour to submit the following report of the Bureau of Colonization for the fiscal year ending October 31st, 1918:

Number of letters received	5,008
Number of letters sent out	4,147
Northern Ontario literature circulated, including:—	
“ A New Land Nearby ”	} 17,656
“ Greater Ontario ”	
“ Ontario ” Handbook	
“ Farming Opportunities in Ontario ”	
“ Heaton's ' Opportunities in Ontario ' ”	
“ Hints to Settlers in Northern Ontario ”	
Ontario Maps	1,236
Railway Certificates to settlers going to Northern Ontario	1,117

The work of this Branch for the year ending October 31st, 1918, was confined almost exclusively to advertising the great possibilities and opportunities in Northern Ontario held out to the prospective settler. About 5,000 people called at the office seeking information. The intention of most of them was to make the North their home after the war.

Although only about 380 settlers were placed in the different districts of the North during the year, this is a remarkable showing in view of the tremendous demand for all classes of people in every line of work throughout the war.

Our Northern Ontario exhibit at Toronto and at Ottawa was more largely attended than ever before. The one in Ottawa was considered by the Directors of the Central Canada Exhibition to be the chief feature of attraction. In addition



Breaking Land in Northern Ontario.



A Busy Haying Scene in Northern Ontario

to the fine varied display of the natural products of the North Country shown in the "Settler's Home" on the grounds, the Agricultural Department next door had, free to all, a moving picture show, exhibiting on the screen all the big industries in Northern Ontario, such as mining, lumbering and agriculture. They had also scenes of summer resorts, with lovely lakes and streams adjoining the hotels, and fish being drawn from the water by rod and line.

Now that the all-absorbing war is over, we look for a new influx of settlers into the gigantic land of great inducements entitled Northern Ontario. Its soil and climate are similar to Manitoba's; millions of fertile acres await the plough; immense profitable forests are ready for the axe and the lumber mill; great gold and silver and other mines are calling for further capital and labour; mighty water powers are proclaiming the coming day of utilized electric energy; and



\$100,000 Pile of Pulpwood in Northern Ontario.

fisheries and hunting fields are offering profit and fascination to romantic minds; thousands of miles of railway and colonization roads interlace the land; big industries are already going; demonstration farms, with district representatives, are there to instruct and aid the settler; and cities, towns and villages, with schools and churches, have risen and continue to rise, as evidences of modern civilization.

That vast land is near, it is within the bounds of the Province of Ontario, and it is 330,000 square miles in area, six times larger than England. Let the prospective settler look at it and consider it well. It is worth while.

Since the preceding paragraphs were written the armistice has been signed, and as one of its indirect effects the immediate outlook in regard to colonization has been changed in a very marked degree. In every programme of reconstruc-

tion, in every discussion of the problem of demobilization, the subject of land settlement is given prominence. It is surely quite natural therefore that a Department such as this, whose work all along has operated so largely in this field, should feel that it has an important part to play in the reconstruction period that we are now entering upon.

In several ways provision has been made to strengthen the organization of the Colonization Branch for the work that lies ahead. In this connection it is worthy of note that the Prime Minister has appointed Brigadier-General R. Manley Sims, C.M.G., D.S.O., to fill temporarily the position of Agent General in the British Isles rendered vacant by the death of Mr. Richard Reid. General Sims, who has had a distinguished military career, is especially well fitted for useful service in this important position at the present time, when the London Office is proving of such great service to our Ontario soldiers overseas, and those who are returning. Mr. J. P. Young, who served in the C.E.F., and who has been assistant secretary to the Prime Minister, has been appointed publicity representative in the Agent General's Office, where his long experience as a newspaper man in Canada and England will be used to make Ontario better known through the press, and to advertise as widely as possible among Canadian soldiers and others what is being done for returned soldiers in Ontario, besides conveying to them information regarding land settlement, employment and re-establishment generally.

The Newcomers' Inn in Toronto, which has done such a splendid work in the past among newly arrived British immigrants, and which is largely maintained by the Ontario Government, and administered by the Salvation Army, has been recently completely renovated and refurnished in readiness for use when the immigration business is resumed. Arrangements are also being made with the Federal Government to obtain space for an Ontario Immigration Office in the great new Union Station at Toronto, which is nearing completion. Being right on the spot, this will enable us to serve the incoming immigrants to Ontario even better than was possible in our old office on Front Street, where so many thousands of British immigrants, who have since become prosperous citizens of our Province, received their first welcome to Ontario, and were sent to employment.

From these features of our present development it will be seen that the Colonization Branch anticipates taking no insignificant part in the upbuilding of our great and rich Province during the coming year of peace, repatriation, and reconstruction.

I have the honour to be, Sir,

Your obedient servant,

H. A. MACDONELL,

Director of Colonization.

Appendix No. 30.

REPORT ON THE CONSTRUCTION AND MAINTENANCE OF HIGHWAYS AND BRIDGES
UNDER THE PROVISIONS OF THE NORTHERN AND NORTH WESTERN
ONTARIO DEVELOPMENT ACTS OF 1912 AND 1915.

(During the Season of 1918)

To the Honourable, the Minister of Lands, Forests and Mines:—

SIR,—I have the honour to submit the following report of the work done on the Construction and Maintenance of Roads and Bridges under the provisions of the above Acts, during the season of 1918:—

Operations were carried on in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste Marie, St. Joseph Island, Manitoulin Island, Algoma, Sudbury, Nipissing, Parry Sound, Muskoka and Renfrew.

In the Eastern part of the Districts the work throughout almost the entire summer season was considerably retarded by the damp or rainy weather in the Western Districts in the vicinity of Port Arthur. In the Valley of the Rainy River and in the District of Kenora the weather conditions were very favourable—comparatively dry weather. Labour, however, was difficult to procure in all the Districts, wages high and food supplies for men and teams expensive. Those engaged on the work were chiefly settlers where they could be procured. In the Agricultural districts during the periods of seeding, haying and harvesting, operations were suspended, in order to convenience the Settlers who wished to work on the roads. Very fair results were obtained throughout the season for the money expended. During the past season fewer miles of new roads were cut out than in previous seasons. Much of the work was confined to the re-construction and maintenance of old roads, by grading, improving and surfacing with either gravel or stone. The maintenance alone of trunk roads constructed within the last six years within the area covered by this season's work was no small task. Over 500 miles had to be looked after, dragged, re-surfaced in places and repaired. No new roads were cut out this season in advance of settlement; in many instances settlement is now considerably in advance of our roads. It was found, however, that in most instances the settlers were quite willing to forego all the comforts that might be derived from new roads during the war, but are living in hopes of relief as soon as conditions improve. During the past season, up to the 31st of October, Three hundred and forty-five thousand dollars was expended on the construction, repairing and maintenance of roads or bridges in the above mentioned Districts.

There is a growing demand by the settlers and business men in Northern Ontario for more roads and better roads. The earth or clay roads of the past will not satisfy them. Motor Cars and Trucks are rapidly becoming the vehicle of the day, and unless the roads are well surfaced with gravel or stone, and of a more permanent character, they will not meet the requirements. There is still, unfortunately, too little interest taken by the users of the Government Constructed roads in their maintenance or upkeep—and unless some legislation is passed in the near future, making it incumbent on the Municipalities through which these roads pass to contribute towards their maintenance they will become a considerable burden on the Province, or will soon become impassable in sections. The public all appreciate good roads, but are apparently not very willing in certain localities to con-

tribute towards their maintenance. Where good roads have been constructed in new districts, correspondingly good improvements on the land are being made by the Settlers. If, in the near future, there is any considerable immigration into Northern and North Western Ontario a considerable increase in road expenditure will be necessary in order to keep up to or slightly in advance of settlement.

During the past season considerable work was done on the North Bay and Bracebridge Trunk road. It has been partly completed to a few miles south of the town of Huntsville. A road was also re-constructed between Powassan Station on the Grand Trunk Railway West of Nipissing Village, a distance of over 10 miles. This road gives relief to a large settlement far distant from Railway facilities. Another season's work on the North Bay & Bracebridge Trunk Road will open a good motor car road between Old Ontario and the town of North Bay. It will take another season's work to surface with gravel all of the Trunk Road between the town of North Bay and Sudbury. Between Sudbury and Sault Ste. Marie there is still a gap of about 17 miles to be constructed between Cutler Station on Canadian Pacific Railway and Algoma Mills. When this is completed it will be possible to motor between Toronto and Sault Ste. Marie. During the past season a macadamised road was constructed between Copper Cliff and the Creighton Mine. On the Manitoulin and St. Joseph Islands operations were carried on on leading trunk roads. These are being surfaced with gravel and well graded and drained. In the District of Rainy River many miles of Trunk Roads were re-surfaced with gravel, new roads cut out and graded, and several miles of large drains constructed. The Trunk Road System was extended between Wabigoon and Oxdrift on Canadian Pacific Railway in the District of Kenora. In the Districts surrounding Port Arthur and Fort William several of the previously constructed Trunk Roads were surfaced or re-surfaced with gravel, and several short roads constructed or improved in the Agricultural sections. A mining road was cut out from Schreiber on the Canadian Pacific Railway North into a new Mining District on Big Duck Lake.

Following is a more detailed statement of the roads constructed in the various Districts during the season of 1918; also a statement of expenditures, and an approximate estimate of expenditure for the season of 1919.

I have the honour to be, Sir,

Your obedient servant,

J. F. WHITSON,
Commissioner.

NORTH BAY TO BRACEBRIDGE TRUNK ROAD.
DISTRICTS OF NIPISSING, PARRY SOUND AND MUSKOKA.

Work was continued throughout the season on the North Bay and Bracebridge Trunk Road. It has now reached a point about 7 miles south of the Town of Huntsville. That part of the Trunk Road constructed from North Bay to Sundridge in previous years was gone over with the drag and re-surfaced in places where found necessary. Considerable gravel was used in re-surfacing and the ditches cleaned out. From Sundridge south to Burks Falls substantial new work was carried on. The distance between these two stations is about 13 miles; between Burks Falls and Katrine 4 miles; between Katrine and Emsdale 5 miles; from

Emsdale to Scotia Junction 2 miles; Scotia Junction to Novar about 6 miles; also about 7 miles of grading south of Huntsville.

The road between the Town of Powassan on the Grand Trunk Railway was re-constructed as far west as Nipissing Village, a distance of about 10 miles. Easterly, 7 miles of this road, leading out of Powassan was well graded and ditched and $2\frac{1}{2}$ miles of it re-surfaced with gravel. The balance of the road, 3 miles, was graded in places where required and gravel placed on the worse parts. 20 culverts of corrugated iron and cedar were placed where required. The bridge across South River, known as "Healy's Bridge," was re-constructed with new stringers and new flooring. While this road had been constructed many years it was in very bad condition. It opens up a large settlement where there is consider-



Northern Ontario Exhibit at Ottawa.

able good farming land. It requires a further expenditure to complete this road, as it should be extended considerably west of Nipissing Village.

The road between North Bay and Burks Falls was continually dragged and kept in good repair. Maintaining this road cost considerable, as the distance from North Bay to Burks Falls is about 60 miles.

The road between Sundridge and Burks Falls was re-graded and gravelled in places. The road was also finished between Katrine and Emsdale and $1\frac{1}{2}$ miles of it gravelled. From Emsdale to Scotia Junction, 2 miles, the road was widened out, ditched and graded, $\frac{1}{2}$ mile of it surfaced with gravel. From Scotia Junction south to Novar, 6 miles, 3 miles was widened, stumped, graded and $\frac{1}{4}$ mile of it gravelled. At Katrine the bridge was reconstructed across Doe Lake outlet. South of Huntsville, beginning about 2 miles from Huntsville, 7 miles was widened, ditched

and graded and 2 miles of it gravelled. 60 corrugated iron culverts were placed where required during the season on this road. A deviation was made, commencing at a point about $1\frac{1}{4}$ miles west from Sundridge, on a road known as the "Distress Road," running to the village of Magnetawan.

On these various roads, \$41,144.22 was expended.

ALGONQUIN PROVINCIAL PARK—DISTRICT OF NIPISSING.

During the season of 1916 a road was cut and graded in the Algonquin Provincial Park from the Algonquin Park Station, Grand Trunk Railway, northerly to Minesing Camp, a summer resort on Island Lake, a distance of 11 miles. The road became badly rutted owing to the fact that it had never been re-surfaced with gravel. The country through which this road passes is rolling, stony, and the soil a light sandy loam with small areas of clay soil in the swamps. When



A Temiskaming settler's first home.

the road was first constructed no gravel suitable for road purposes was available, the only road material used being a light loam. The road passes through a densely timbered section of the Park and the road originally was not cut out the usual width as it was only used as a tourist road; consequently there was little chance of the sun ever drying the road after the foilage came out. There is considerable traffic over this road during the tourist season, and also in the winter season hauling cord wood to the Railway Station.

During the season of 1918 the road was widened out in places, re-ditched and re-graded for a distance of $8\frac{1}{2}$ miles, and parts of the road surfaced with gravel for a distance of $6\frac{1}{2}$ miles. Owing to the very wet season and the difficulty in getting gravel slow progress was made on this road. The road so far as it has been completed is in a first class condition and is a very beautiful drive for tourists through an almost virgin forest heavily timbered with maple, birch, beech and iron wood. The road for several miles back from the Railway Station can in the future

be used in connection with hauling of hard wood to the Station for fuel purposes. Thirty new culverts were placed in this road and 1,750 yards of gravel used in re-surfacing.

\$13,722.79 was expended on this work.

NORTH BAY TO SUDBURY TRUNK ROAD—DISTRICT OF NIPISSING.

Operations were started on this work early in January, 1918. Near Warren Station on the Canadian Pacific Railway the road was re-surfaced with gravel east and west of this point for a distance of 9 miles, west as far as Liberty's Bridge about $4\frac{1}{2}$ miles and east about the same distance. 7,170 cubic yards of gravel were used in surfacing this section. About the same time a bridge was constructed over the Veuve River about $\frac{3}{4}$ of a mile west of Markstay Station. The bridge was built of cedar piles with white pine stringers and floored with tamarac planking.



A settler's buildings, Temiskaming.

A section of the road was re-gravelled near Wahnapiatae Station on the Canadian Pacific Railway. The road from Wahnapiatae Station to Sudbury was dragged and rolled with a 12 ton roller, after having it re-surfaced in places with crushed rock. During the summer season the road from North Bay to Sturgeon Falls was dragged. It was found, however, owing to the very wet season, difficult to keep this road in repair. That is, a section near Meadowside, where the road passes through flat country, the subsoil of which is quicksand. This section of the road will be required to be re-surfaced with gravel, which, unfortunately, cannot be found in the vicinity, before it will make a good permanent road. The road between Coniston Station and Sudbury has been dragged and rolled on two different occasions during the season and re-surfaced in a few places where it had become rutted.

Early in October a land slide occurred about 2 miles west of Warren on the bank of the Veuve River. About 260 feet in length of the road close to the bank dropped from 5 to 10 feet. This was owing to the washing out from under the

road bed of the quick sand. This had evidently been going on for years. The point is where the Veuve River turns at a sharp angle and the current strikes the bank. This has been repaired and took 2,500 cubic yards of rock to complete the work. About 2 miles further west on the same road, where the trunk road crosses the Veuve to the south shore, an old bridge which was constructed about 15 years ago gave way, both abutments became rotten and the bridge collapsed. A new bridge with stone abutments is now under construction with a clear span of 60 feet.

A road was explored from a point about 3 miles north of St. Charles near the south east corner of the Township of Dunnet, north to Hagar Siding on the Canadian Pacific Railway, a distance of a little over 3 miles, and cut out for a winter road, but not graded.

\$36,961.85 was expended on this road.



A view on the Sault Ste. Marie trunk road.

COPPER CLIFF AND CREIGHTON TRUNK ROAD AND OTHER ROADS IN THE VICINITY OF SUDBURY.

Early in February operations were started on the road from the Town of Copper Cliff to the Creighton Mine, a distance of about seven miles. The work was carried on on this road throughout the winter and well on into August. A first class waterbound macadamized road was constructed between these two places. Ten thousand and six hundred cubic yards of crushed rock were used on the construction of this road. The rock was procured from the Canadian Copper Company's Crushers at Creighton Mine and hauled by teams over the road. Between Copper Cliff Station and Naughton Station on the Canadian Pacific Railway, Soo branch, the Trunk Road, which was built nearly 10 years ago, was improved, regraded in places and surfaced with gravel in places. This road is still, however, in bad condition in sections, and will require to be re-graded and gravelled the coming season.

The Trunk Road between Sudbury and Azilda on the main line of the Canadian Pacific Railway was dragged and improved where required. A new road was cut out from a point on the Canadian Northern Railway about a mile north of Milnet Station westerly to the Sellwood Mines near the Village of Sellwood. This road was cut out, culverts built, and made suitable for winter traffic. The road was constructed with a view to letting the people in the vicinity of the Sellwood Mines have access to the main line of the Canadian Northern Railway.

A waterway into West Shining Tree, gold mining district, was improved by the construction of 3 dams to regulate the water for navigation purposes.

\$20,506.54 was expended on these roads.



Spanish River Lumber Company's mills and yard at Cutler, the western terminus of the Sudbury and Sault Ste. Marie trunk road.

SAULT STE. MARIE TRUNK ROAD, SAULT STE. MARIE TO ALGOMA MILLS—WORK PERFORMED DURING THE SEASON OF 1918.

On the above road, which has been constructed during the last six years, very little new work was required this season. The road has been surfaced with rock or gravel almost throughout the entire length, 102 miles, Soo to Algoma Mills. The road still, however, requires repairing and re-surfacing in places. During February and March of last season, 1,265 cubic yards of gravel was used in surfacing about $2\frac{1}{2}$ miles along the Mississauga River in the Township of Thompson.

The balance of the season's work on this road was chiefly in maintenance or repair work from the Soo to Algoma Mills. Early in the season the western part of the road, from the Soo to Garden River was re-surfaced with crushed rock, 578 tons were required; the balance of the road was kept in repair by an overseer employed to patrol the road from end to end, make such repairs as were

Current and Gore Bay trunk road through the Townships of Howland, Allan and Gordon, $7\frac{1}{2}$ miles was widened out, ditched, graded, and surfaced with gravel. Eight culverts and 4 small wooden bridges and 1 small stone bridge were constructed. Six thousand yards of gravel was used in surfacing this section of the road, and 4,000 yards on the Little Current and Manitowaning section.

On the Little Current and Manitowaning road 8 culverts were constructed. The worst parts of this road have been repaired. The very best of road material was used as it is found in great abundance in many places along this road. The wooden culverts were made out of cedar and also the abutments for bridges where stone was not used.



Remunerative winter work, Northern Ontario.

DISTRICT OF THUNDER BAY.

In the Vicinity of Port Arthur and Fort William.

Operations were started in this district about the middle of March, gravelling and re-gravelling parts of the International Highway between Port Arthur, Fort William and Pigeon River, locally known as the "Scott" Highway. The work was commenced on the eastern boundary of the Township of Neebing, a couple of miles east of the Prison Farm and portions of this road, which had not been gravelled the previous seasons, or where the gravelling done last season was not sufficiently heavy, were gravelled or re-gravelled this season, as far south as the International boundary at Pigeon River. The ditches, where they were found insufficient to carry off the water, were deepened and widened. Several new culverts were constructed. The worst grades on the road were cut down and at Horn Hill, where a mountain slide carried away part of the bed of the road into the Pigeon River, the road was re-constructed. Heavy rains of the previous

season late in the fall of the year caused considerable damage on this road. There were many washouts caused by the freshets coming down the hillsides from the north side of the road, the road being built through a valley, with mountain ranges in places rising to a height of over a thousand feet close to the road. Three small bridges, with 10-foot spans were constructed in the Township of Paipoonge, and one bridge, 32-foot span across the Slate River, all in the Township of Paipoonge.

After gravelling was finished, and while it was being done, the road was frequently dragged and kept in first class condition during the season. On this road there is now a great deal of automobile traffic from the northern part of the United States, Duluth, Superior City, Minneapolis and St. Paul and other cities. This road will soon become one of the most popular tourist roads in



A winter harvest, Northern Ontario.

Western Ontario, as well as in the northern part of the United States. The scenery along the road is very fine.

Oliver Road:

This road was re-graded, and surfaced with shale rock and gravel from Kakebeka to Mirillo, about 9 miles. Six thousand five hundred yards of shale rock and gravel was used on this road.

Arthur Street Road:

This road was re-graded and gravelled from Kakabeka Falls easterly for 5 miles. Four thousand and two hundred and fifty-eight yards of gravel were used on this road.

Township of O'Connor:

Re-graded road between Concessions 6 and 7 across lots 1 to 6, 3 miles; also re-graded road between lots 6 and 7, across Concessions 6, 5, 4, 3, 4 miles, and the north half of 2, $1\frac{1}{2}$ mile. Put 3 culverts and 5 bridges on this road, one across Cedar Creek 22-ft. span, one across Tin Pail Creek, 16-ft. span, one across Cotton Wood Creek, 18-ft. span, 2 (across unnamed creeks) 16 and 18-ft. span, respectively.

Pearson Township:

Road between 3 and 4 Concessions, across lots 7, 8, 9 and 10 was re-graded. Two small bridges were constructed. On this road $1\frac{1}{2}$ mile of new road was graded and one mile old road re-graded.

Township of Conmee:

Between lots 4 and 5 across N. $1\frac{1}{2}$ of Concessions 1, 2, 3, 4, and the S. $1\frac{1}{2}$ of Concession 5 to Brule Creek, a distance of 4 miles. On this road hills were cut down, road widened, ditched and graded. Several small culverts were put in and about one mile road was gravelled. $1\frac{1}{4}$ mile crosslaid, and bridge across Brule Creek repaired.

Silver Mountain Road:

This road from the Silver Mountain to Hymers was brushed out to a width of 50 ft., graded and ditched in places for a distance of $11\frac{1}{2}$ miles. This road now connects up Stanley Village, Fort William and Port Arthur and surrounding country to the Village of Hymers.

Dawson Road:

Commencing on the west boundary of McIntyre Township, operations were carried on northwesterly to Kaministiquia, C.P.R. Stations, $9\frac{1}{2}$ miles. This road was re-graded and graded and culverts placed where required. A bridge 62 ft. long was reconstructed across a small creek flowing out of Mud Lake along the road. Several hills were cut down and gravel placed on the road where required. The road was gravelled in places for a distance of about 3 miles. Three small bridges with 12 ft., 10 ft. and 15 ft. spans were constructed and 76 wooden culverts placed.

\$82,724.52 was expended in this district.

ROADS IN THE DISTRICT OF KENORA.

The work in this district was commenced early in June at Dryden on the Canadian Pacific Railway on lot 5, Concession 5, Township of Van Horne. From this point the work extended westerly to a point west of Oxdrift Station and east of Dryden commencing at Elm Bay, about 10 miles and extended from that point easterly to the Village of Wabigoon. This work was a continuation of the work of the trunk road system started in this section in 1917. While the season was very favourable for road work, owing to weather conditions, the difficulty of getting labour was very great and for that reason we were not able to carry out all the work laid out for the season. Near Dryden a diversion was made from the

old road passing through the Dryden Pulp & Paper Company's property. The diversion made improved the grade and shortened the distance. At this point there was an offtake drain dug into the Wabigoon River, 300 ft. From Dryden west to Oxdrift Station, about 7 miles, the old road was widened and straightened. The worst grades were cut down and depressions filled. The road was well ditched and graded. Corrugated iron culverts were placed where required and 2 small wooden bridges constructed on lots 6 and 8 in the 5th Concession, Van Horne. The road was surfaced with gravel for a distance of 5 miles. Forty-two corrugated iron culverts, ranging from 10 in. to 36 in. in diameter were placed where required and 3 stone culverts constructed. Swamps or muskegs were all well ditched and covered with corduroy where required and an offset ditch dug on lot 11, Concession 6 on said township $1\frac{1}{2}$ mile in length. The work extended about 4



A view of the prehistoric mounds on the banks of the Rainy River.

miles west of Oxdrift Station on the Canadian Pacific Railway. This portion of the road, however, has not been gravelled, but merely brushed out, ditched and graded. Owing to the long haul in getting gravel, it was deemed advisable to do this work in the winter season, as it could then be done at a much less cost.

The trunk road east of Dryden was constructed last year to a point on Elm Bay of Wabigoon Lake. From that point to the Village of Wabigoon, the old road was abandoned owing to the character of the country it passed through, it being a mere lumber road. A new road was located through a level country, the distance being about $6\frac{1}{2}$ miles. This road was cut out and the brush piled, but no grading done.

In the Township of Mutrie, west of Eagle River, 16 miles west of the Town of Dryden, a small piece of work was done in front of lots 8, 9 and 10, Concession 1, about $1\frac{1}{2}$ miles of this road was partly reconstructed.

The trunk road connecting the Towns of Kenora and Keewatin constructed 6 years ago was repaired and re-surfaced in places where it had become rutted and the dangerous crossing on the Canadian Pacific Railway almost in front of the Keewatin Station was improved and widened from 12 ft. to 32 ft. The grade on approaching to the railway was cut down, and a retaining wall of 150 ft. in length made of stone was erected, making this dangerous crossing safe.

\$14,234.31 was expended on the work in this district.



A vegetable garden on the banks of Rainy River, showing one of the prehistoric mounds to the right.

ROADS CONSTRUCTED AND REPAIRED IN THE DISTRICT OF RAINY RIVER.

Number of miles of	new and old roads worked on	71
"	" new roads graded	15
"	" old roads graded	22¾
"	" road ditches dug	19
"	" road cut out	14¼
"	" roads grubbed	11
"	" roads gravelled	27¾
"	" tap drains dug	2¼
"	" road dragged	94
	culverts built	27
	bridges built, 20-ft. span	1

TOWNSHIP OF SPOHN.

On road south of con. 3, in front of lots 5 and 6, 1 mile of new road was graded, of which ¼ mile was grubbed and ¾ mile gravelled.

On road between lots 4 and 5, across cons. 3 and 4, 1 mile was double ditched, ¾ of a mile single ditched, and 1¾ miles graded.

WILD LANDS RESERVE.

On road between secs. 29 and 30, 22 and 21, 13 and 14, and between 5 and 6, 4 miles of new road was graded, $4\frac{1}{2}$ miles of ditches deepened, 1 mile of tap drain dug, 4,500 feet being between secs. 5 and 13 and the remainder north of sec. 5; 6 culverts were built on the above roads.

The above road in the Wild Lands Reserve and the Township of Spohn completes the grading of the highway from the Town of Rainy River to the Lake of the Woods and is the only highway in the Rainy River district connecting the highway system with the Lake of the Woods.



A field of grain in the Rainy River Valley near Stratton. Yield 100 bushels to the acre.

Township of Atwood:

On road east of Section 36, 1,400 ft. of road was double ditched and 4,000 ft. single ditched—(1 mile 120 ft.) One mile 120 ft. of the above road was graded. On road across river lots 1 to 23 and east of river lot 24, 2 miles of road was re-gravelled.

Township of Blue:

West of Sections 6, 7 and 18 and north of Section 7, 4 miles of road was single ditched and the grubbing widened out four feet. The above road was graded through its entire length for a distance of 4 miles. North of Section 8 the road was cleared, burnt and grubbed for a distance of $\frac{1}{2}$ mile and 338 ft. and 2 culverts built.

Township of Worthington:

On the road south of Sections 32, 34, 35 and 36, one mile and 1,432 ft. re-gravelled. The road ditches were deepened for a distance of 2,186 ft, and 2 new culverts built.

Township of Pratt:

On road between lots 4 and 5 across Concessions 5 and 6 and across lots 3 and 4 north of Concessions 6, three miles of road was re-graded and brush cut and burnt on side of road for $2\frac{1}{2}$ miles.

Township of McCrosson:

The road between lots 2 and 3 across Concessions 1 and 2 was re-graded for 2 miles and brush on the sides of the road cut for $2\frac{1}{2}$ miles and partly burnt; $\frac{1}{2}$ mile of this road was double ditched, and 3 new culverts built.

Township of Dilke:

The trunk road west of river lot 48 and across river lots 1 to 48 was re-gravelled for approximately $3\frac{1}{2}$ miles, and one new culvert built.

Township of Morley:

On road west of Sections 18 and 19, one mile of road was re-gravelled. North of Section 19 one mile of road was gravelled and re-graded. North of Sections 11 and 12 about $\frac{1}{2}$ mile of the trunk road was gravelled.

Long Sault Reserve:

On the trunk road south of the Canadian Northern Railway 3 miles of road was gravelled. The road on the west boundary of Section 3 was cleared and burnt for $\frac{1}{2}$ mile, and grubbed and graded. On the road between river lots 30 and 31 and on the continuation of said road north of the Canadian Northern Railway 1 mile was cleared and burnt, and $11\frac{1}{4}$ miles grubbed, about 1 mile graded and $\frac{1}{4}$ mile of corduroy placed. On the road between Sections 11 and 12 and between river lots 44 and 45, $17\frac{3}{8}$ miles were cleared and partly grubbed and burnt.

Township of Shenston:

On road east of Section 19, $\frac{1}{4}$ mile of road was cleared, burnt, grubbed and graded. On the road north of Sections 34, 35 and 36, $2\frac{3}{4}$ miles were cleared and partly burnt.

Township of Nelles:

Road between Sections 8 and 9, and between Sections 4 and 5 was graded for 1 mile, and $\frac{1}{4}$ mile gravelled and ditched, and 330 ft. of corduroy laid. On road between Sections 5 and 8, and 6 and 7, $\frac{3}{4}$ of a mile was graded and $\frac{1}{2}$ mile gravelled.

Township of Barwick:

Across the Township of Barwick the trunk road was re-graded for 3 miles. The trunk road across river lots 34 to 44 was gravelled for 1 mile.

Manitou Indian Reserve:

The trunk road on the Manitou Reserve was gravelled for $\frac{1}{4}$ mile, and 3 miles was re-graded.

Townline of Mather and Kingsford:

On the road across Concessions 4, 5 and 6 and on correction line on the north boundary of Kingsford, 3 miles of road was burnt and grubbed, $2\frac{1}{4}$ miles of side ditches were built, 2 miles of road put up with slushers and horse grader, 1 mile of corduroy laid, 1 mile of tap drain dug and 6 culverts built, and 1 bridge built with a span of 20 ft.

Township of Potts:

On the north end of road between lots 2 and 3 across Concessions 1, 2, 3, 4 and 25 chains on the south of Concession 5, 1 mile and 1,560 feet were cleared and partly burnt. Half mile of this road was single ditched, $\frac{1}{2}$ mile of corduroy laid, and 3 miles grubbed and $1\frac{1}{2}$ miles graded, and 4 culverts built.



A view on the banks of the Rainy River.

Township of Lash:

On road north of Sections 25 and 26, $\frac{1}{2}$ mile of road was re-graded over rock. On road north of Sections 25, 26, 27 and 28, 3 miles of road was gravelled.

Township of Carpenter:

On road east of lot 1, across Concessions 3, 4, 5 and 6, $3\frac{1}{2}$ miles of road was re-graded.

Township of Devlin:

On the road north of Sections 30 and 29 and east of Section 29, and north of Sections 21, 22, 23 and 24, $4\frac{1}{2}$ miles of the trunk road was re-gravelled. On road north of Section 20, $\frac{1}{2}$ mile was gravelled. The road east of Section 3 was re-graded for $\frac{1}{2}$ mile.

Township of Woodyatt:

The river road across lots 28 to 47 was re-graded for $2\frac{1}{2}$ miles. The above road was gravelled excepting across lots 31 and 32 for $2\frac{1}{4}$ miles. The road east of river lot 17 and Section 34 was re-graded and gravelled 2 miles.

Township of Kingsford:

Road between lots 4 and 5 across Concession 2 was grubbed, ditched and graded 1 mile.

Township of Miscampbell:

The road across lot 4 south of Concession 1, and between lots 4 and 5 across Concession 1 was cleared, grubbed and single ditched for $1\frac{1}{4}$ miles. Twelve hundred feet of tap drain was dug and 3 culverts built.

\$69,480.59 was expended on the work in this district.

To the Honourable G. H. Ferguson, Minister of Lands, Forests and Mines, Ontario.

SIR,—I have the honour to present to you the report of the road and bridge construction and improvement carried out in the District of Temiskaming and that portion of the District of Algoma, in the vicinity of Hearst, which is at present the northern terminus of the Algoma Central & Hudson Bay Railway, during the year ending October 31st, 1918, under the provisions of the Act of 1912 and its subsequent amendments for the Development of Northern and North-western Ontario.

For the purpose of carrying on the work the area described above is divided into sub-districts designated by the centre from which the work is locally directed as follows; the Englehart, Matheson, Cochrane and Hearst districts. In addition there was work done upon the roads independently of these local headquarters and these are reported upon separately.

Whether or not, it is the fear that the Government will curtail the expenditure of money on roads and bridges in organized townships and that consequently taxes will be levied locally for such and similar expenditures, or, for some other reason or reasons few steps are being taken to form municipal organizations in Temiskaming. The Township of Teck in the Kirkland Lake Mining District has taken steps to organize, the residents of the Township of Playfair near Matheson are discussing it seriously and the Townships of Savard and Marter near Englehart have organized under the Statute Labour Act to assist in the construction and maintenance of their roads, but outside of these townships I have heard of no move being made in the direction of assuming the burden of their own public works.

The season in Temiskaming was rather unfavourable for the carrying on of road work, particularly in the latter portion of it. It rained rather frequently during the fall, retarding road construction.

Attached is a statement giving in detail the work accomplished, the expenditures being shown in the statement of the Secretary.

I have the honour to be, Sir,

Your obedient servant,

C. H. FULLERTON,

Acting Director Northern Development Branch, Temiskaming District.

Toronto, Ont., October 31st, 1918.

COCHRANE DISTRICT.

Township of Brower:

Road between Concessions 4 and 5 across Lots 1 and 2, one mile cut, burned and grubbed.

Road between Concessions 2 and 3 across Lots 9 to 12, two miles grubbed and sideditched.

Road between Lots 6 and 7 across Concessions 4 and 5, $\frac{3}{4}$ mile sideditched.

Road between Lots 10 and 11 across Concession 5, $\frac{3}{4}$ mile sideditched.

Road along Canadian Government Railway across Lot 7; $\frac{1}{3}$ mile sideditched.

Road between Lots 8 and 9 Concession 5, $1\frac{1}{2}$ miles sideditched.



The Fort Frances and Rainy River trunk road through the town of Rainy River.

Township of Calvert:

Roads between Lots 4 and 5 across Concessions 2 and 3, between Concessions 2 and 3, across Lot 5 and between Lots 5 and 6, across Concession 1, one mile sideditched.

Road between Concessions 4 and 5 across Lots 1 and 2, $\frac{1}{2}$ mile graded and 400 ft. sideditched.

Road between Concessions 1 and 2 across Lot 9, $\frac{1}{2}$ mile cut and burned.

Road between Concessions 4 and 5, one mile cut, burned and grubbed across Lots 4 and 5.

Roads between Lots 4 and 5, across Concessions 2 and 3 and between Concessions 1 and 2 across Lot 5, $\frac{1}{2}$ mile grubbed and $1\frac{1}{2}$ miles sideditching.

Road between Concessions 4 and 5, across Lot 3, 1,000 yds. cut, burned and grubbed.

Trunk Road, Iroquois Falls to Porquis Jet. 1 culvert built, 1 mile graded, 51 chains ditched, 47 chains repaired and 53 chains gravelled.

Road between townships of Calvert and Clergue across Concession 1, 3 culverts repaired, 13 chains gravelled and 122 chains ditched.

Township of Clergue:

Road between Concessions 4 and 5 across Lots 3, 4 and 5, $1\frac{1}{2}$ miles cut and burned.

Township of Clute:

Road between Concessions 4 and 5, across Lots 26, 27 and 28; 20 chains grubbed and 3 chains ditched.



Large game in the District of Rainy River.

Roads between Concessions 8 and 9, across Lots 14, 15 and 16, and between Lots 12 and 13 across Concession 7, 27 chains ditched.

Road between Concessions 10 and 11, across Lots 1 and 2, 1 bridge and 1 culvert built and 5 chains graded.

Road between Lots 12 and 13, across Concessions 2 to 7, 2 culverts built, 48 chains ditched, 84 chains graded and 7 chains repaired.

Township of Glackmeyer:

Road between Concessions 6 and 7, across Lot 12, 18 chains repaired.

Road between Lots 24 and 25, across Concession 2, 47 chains gravelled, and 11 chains repaired.

Road between township of Glackmeyer and township of Clute, across Concessions 7 to 12 inclusive, 3 bridges and 7 culverts built, 18 chains ditched, 27 chains repaired and $2\frac{1}{2}$ miles graded.

Roads between Concessions 4 and 5, Lots 19 to 23 inclusive, and between Lots 18 and 19, Concessions 2 to 12 inclusive, 7 culverts built and 3 repaired, 16 chains grubbed, $22\frac{1}{2}$ chains ditched, 145 chains graded and 360 chains repaired.

Township of Lamarche:

Road between Concessions 5 and 6, across Lot 4, 10½ chains ditched.

Road between Lamarche and Glackmeyer townships across Lots 5 to 9 inclusive, 22 chains cut and burned and 61 chains gravelled.

Road between Lots 8 and 9, Concession 6, 60 chains repaired and 67 chains gravelled.

Road between Lots 6 and 7, Concession 5, 32 chains gravelled.

Road between Lots 5 and 6, across Concessions 7 and 8, 69 chains repaired and 60 chains gravelled.

Road between Lots 2 and 3, across Concession 6, 5 culverts built and one repaired, 1 mile ditching and 3 chains of repair to road.



A field of corn in the District of Rainy River, Township of Curran.

Township of Leitch:

Road between Concessions 4 and 5, across Lot 2; 25 chains grubbed.

Road between township of Leitch and Blount, across Concession 6, 1 culvert built and ½ mile grubbed and ditched.

Township of Newmarket:

Trunk Road on line between Calvert and McCart, across Concession 6 and along T. & N. O. Railway from mileage 231.5 to mileage 236 in the township of Newmarket, 4½ miles cut and burned, 5 miles grubbed, 3 miles ditched and a small amount of repairs.

Township of Shackleton:

Road across Lot 21, Concession 12, 23 chains cut, burned and grubbed.

Road across Lot 23, Concession 12, 20 chains grubbed.

ENGLEHART DISTRICT.

Township of Armstrong:

The road on Lot 6 Concession 4 drained and gravelled and a culvert was built on it.

The boundary road between Armstrong and Beauchamp was improved by replacing 2 trestle bridges with culverts and fills in Concessions 4 and 5. In Concession 6, $\frac{1}{2}$ mile of new road was cut out and made ready to grade the remaining $\frac{1}{2}$ mile being grubbed 15 ft. in width.

Townships of Beauchamp and Henwood:

The boundary road between these townships was improved by replacing 2 bridges with culverts and fills.

Township of Catharine:

The road between Concessions 1 and 2, across Lot 12, was stumped and several culverts built.

Township of Chamberlain:

The roads between Concessions 4 and 5, across Lot 11 and between Lots 10 and 11, across Concession 5, were re-cleared and drained, 7 culverts built and are now ready for grading.

The road between Concessions 5 and 6 from centre of Lot 8 to west side of Lot 10, was cleared and grubbed ready for grading.

The road between Concessions 3 and 4, across Lots 7 and 8 was cut and logged.

The road between Concessions 1 and 2 was improved as follows: stumped and grubbed across Lot 8 and cut out, stumped and grubbed across Lots 9 and 10, 14 culverts were built and the road ready to be graded.

Township of Dack:

A new road was made in Concession 6, across Lots 1 and 2, along the T. N. O. Railway and thence West to the West side of Lot 2, the road was drained and made ready to grade, 12 excellent cedar culverts were built upon it.

The road from Englehart to Charlton across Lots 1, 2, 3, and 4, Township of Dack and across Lot 12 Township of Evanturel, between Concessions 5 and 6, was dragged and repaired.

Temporary repairs were made upon the roads between Lots 2 and 3, Concession 6.

The road between Dack and Chamberlain townships was repaired for 2 miles across Lots 9, 10, 11 and 12.

The road between Lots 8 and 9, across Concession 6 was repaired and a culvert built on it.

Opposite Lot 9 between Concessions 5 and 6, a culvert was built and the approaches improved.

The road between Concessions 4 and 5 was graded across Lots 1, 2, 3, and 4 and drained across Lot 4.

The road between Lots 2 and 3 was stumped ready for grading and 4 culverts were built.

Three hills on the road across Lots 12 in Dack and 1 and 2 Robillard between Concessions 3 and 4 were reduced.

Township of Evanturel:

The road between Concessions 1 and 2 was drained and graded across Lots 1 and 2. The road between Concessions 5 and 6 was repaired across Lots 7 and 10 inclusive.

The road between Concessions 3 and 4; to prevent the flooding of Lot 6, Concession 4 by road drains, a ditch across this Lot was undertaken to carry the water to a suitable outlet.



Potato field in the Rainy River Valley.

The road between Evanturel and Ingram across Concessions 2 and 3 was repaired, the drainage was improved and 3 culverts built.

Township of Lorrain:

The roads between Lots 12 and 13 across Concessions 3 and 4, for a distance of $1\frac{1}{2}$ miles, was stumped, grubbed, drained and graded and 7 culverts built.

Across Lot 12 Concession 5 the road was drained, a culvert built and 50 yds. of gravelling done.

Township of Marter:

Road between Lots 10 and 11, Concession 1, approaches to bridge over Crocodile Creek were improved.

Road between Lots 6 and 7, Concession 1, repaired a distance of 400 yds.

Road between Lot 5, Concession 4 cut out 40 ft. wide, stumped 12 ft. wide and 1 culvert built.

Road between Concessions 3 and 4 was drained by conveying water to a suitable outlet, instead of flooding private land.

On road between Lots 2 and 3 across Concession 1, Marter, and Concession 6 Evanturel, $\frac{3}{4}$ of a mile was stumped and graded, 100 yds. of corduroy laid and a hill reduced.



Typical view of one of the back townships in the District of Rainy River.

Township of Marquis:

Road between Lots 8 and 9 across Concession 1, stumped, grubbed and drained, 8 culverts and 1 bridge, 20 ft. span, built and 100 yds. of corduroy laid.

Township of Otto:

Road across Lots 3 and 4, between Concessions 5 and 6 stumped, sidebrushed and drained, 4 culverts were built.

Township of Pacaud:

A road was built from the new railway station at Boston Creek to connect with the road which leads to the working properties.

Road across Lot 6, Concession 6 was cut 40 ft. wide and stumped 20 ft. wide, 2 culverts were made and the road graded.

Road between Concessions 4 and 5, a bridge of 30 ft. span was built and the approaches graded.

On road between Lots 4 and 5, a bridge of 40 ft. span was reconstructed and the approaches improved in Concession 1, and the ditches re-opened and the road graded across Concession 2.

Township of Robillard:

Road between Lots 8 and 9 across Concession 5, $\frac{1}{2}$ mile logged, and stumped 30 ft. wide.



View on the Rainy River and Spohn trunk road.

Township of Savard:

Road between Lots 2 and 3 across Concession 1, $\frac{1}{2}$ mile cleared and stumped 30 ft. wide.

Townships of Robillard, Truax, Tudhope and James:

The road from Charlton to Englehart runs through these townships and it had fallen so badly into disrepair that travel over it was exceedingly difficult and unsafe. General repairs were made upon it for a distance of 16 miles. Rock and boulders were removed, the drainage vastly improved, 26 culverts were made, $11\frac{1}{2}$ miles were gravelled and $\frac{1}{2}$ mile of corduroy laid and covered.

HEARST DISTRICT.

Township of Casgrain:

Road on line between Lots 24 and 25 across Concessions 1, 2, and 3, general repairs.

Road on line between Concessions 2 and 3, across Lots 25 and 26, general repairs.

Road on line between Concessions 4 and 5, across Lots 20, 21 and 22.

Road on line between Lots 18 and 19, on part of Concessions 1, 4, 5 and 6, grading and building culverts.

Road on line between Concessions 2 and 3, across Lot 24 and part of 23, ditching.

Road on line between Concessions 4 and 5, across part of Lots 18 and 19, ditching.

Road on line between Lots 18 and 19, across Concessions 4 and 5 and part of 6, ditching.

Township of Hanlan:

Road across Lots 23 to 28 inclusive, Concession 2, grubbing and burning.

Road on line between Lots 18 and 19, across Concession 2 and part of Concession 1, grubbing and burning.

Road across part of Lot 20, Concessions 1 and 2, and Lots 21 to 23, Concession 2, ditching.

Road on line between Lots 18 and 19, across Concession 2 and part of Concession 1, ditching.

Township of Kendall:

Road between Lots 24 and 25, across Concessions 11 and 12, general repairs.

Road across part of Lots 21 and 22 and all of Lots 23 and 24, Concession 10, on East bank of Mattawishkwia River, grubbing and burning.

Road on line between Lots 24 and 25, across Concession 9 and part of 10, grubbing and burning.

Road between Concessions 9 and 10, grading and building culverts.

Road on East bank of Mattawishkwia River; temporary bridges on line between Lots 24 and 25.

Road on Lots 25 and 26 and part of 27 and 28, between Concessions 9 and 10, ditching.

Road on line between Lots 24 and 25, across part of Concessions 9 and 10, ditching.

Road on part of Lots 23 and 24, on East bank of Mattawishkwia River, ditching.

Road between Townships of Kendall and Way, across Lots 1 and 5 inclusive, grubbing and ditching.

Road across Concessions 8 to 12 inclusive, general repairs.

Road across Concession 7, grubbing, burning and ditching.

Trunk Road, regrading, ditching, repairing culverts, across townships of Kendall, part of Way and Lots 12 to 16 Hanlan.

Township of Owens:

Road from sand pit new mileage $80\frac{1}{2}$ Canadian Government Railway, to North Boundary of Owens township, $65\frac{1}{2}$ chains cut, $14\frac{1}{2}$ chains graded, $8\frac{1}{2}$ chains crosslaying.



Draining the Swamp Lands in the District of Rainy River, through the Wild Land Reserve.

Road between Lots 24 and 25 from boundary between townships of Owens and Williamson, $2\frac{1}{4}$ miles cut, 2 miles graded, with crosslaying where necessary.

Road between Concessions 16 and 17, 21 chains cut, burned, and grubbed, $21\frac{1}{2}$ chains graded, $7\frac{1}{4}$ chains crosslaying.

Road between Concessions 14 and 15, 44 chains slashed, 27 chains stumped and grubbed.

Road between townships of Owens and Williamson, across Lots 25 and 26, $\frac{1}{2}$ mile cut, 26 chains road completed, 10 chains crosslaying, 5 chains grading.

A Railway spur was run off the Canadian Government Railway at about mileage $80\frac{1}{2}$, for the purpose of settlement in Owens township.

Township of O'Brien.

Road between Lots 12 and 13, cutting, grubbing and burning, 1 mile to line between Concessions 8 and 9.

Road between Concessions 8 and 9, cutting, grubbing and burning across Lots 1 to 25 inclusive and cutting and burning across Lot 26.



Bridge at "Notch," near mouth of Montreal River, Temiskaming.

Road between Concessions 12 and 13, from line between Lots 16 and 17 to line between Lots 10 and 11, cutting, grubbing and burning ditching and crosslaying; and cutting, grubbing and ditching across Lots 15 to 18 inclusive.

Road between Concessions 10 and 11, from line between Lots 24 and 25 to line between Lots 12 and 13, cutting, grubbing, burning, ditching and crosslaying.

Road between Concessions 14 and 15, across Lots 19, 20 and 22, draining roadway and building culverts.

Road between Lots 18 and 19, cutting, grubbing, ditching and crosslaying, across Concessions 10, 11 and part of 12.

Road between Lots 6 and 7, across Concession 9, cutting and grubbing, and across Concessions 5, 6, 7 and 8, cutting and burning.

Road between Lots 22 and 23, cutting, grubbing, burning, ditching and crosslaying across Concessions 11 and 12.

Road between Concessions 10 and 11, cutting, grubbing and burning across Lots 1 to 8 inclusive.

Roads between Lots 24 and 25, across Concessions 7 to 10 inclusive, and between Concessions 6 and 7, across Lots 25, 26, 27 and 28 to Woman River, cutting, grubbing and burning.

Road between Lots 12 and 13, cutting, grubbing and burning across Concessions 5 to 15 inclusive.

Road between Concessions 6 and 7, cutting, burning, and grubbing across Lots 1 to 12 inclusive.

Road between Lots 6 and 7, cutting, grubbing and burning across Concessions 10 to 14 inclusive.

Road between Concessions 12 and 13 across Lots 1 to 6, cutting, grubbing and burning.

Road between Concessions 14 and 15, across Lots 12 to 20 inclusive, cutting, burning and grading.

Trunk road along North side of railway, across 8 to 26, repaired, drained, corduroy laid and culverts built.

Boundary road between townships of O'Brien and Fauquier, cut, grubbed and burnt across Concessions 5 to 12 inclusive.

In addition to the above, the following were built, a bridge on Lot 19, on the line between Concessions 12 and 13, 10 temporary bridges and 28 culverts.

The work of bridging the Kapuskasing River has been undertaken, contracts were let for the delivery of two steel spans, one 80 ft. and the other 120 ft. in length, and four masonry abutments have been constructed to support the steel spans.

MATHESON DISTRICT.

Township of Beatty:

Road between Lots 9 and 10, Concession 1, 1 mile cut, stumped and gravelled.

Road between Lots 10 and 12, $\frac{3}{4}$ mile cut and logged in Concession 1, 2 miles cut, stumped and grubbed in Concessions 4 and 5.

Road between Concessions 2 and 3, 40 chains stumped and grubbed across Lot 5 and part of 6, $1\frac{1}{2}$ miles regraded across Lots 11, 12 and 13.

Township of Benoit:

Road between Concessions 2 and 3, $\frac{1}{2}$ mile stumped and grubbed across Lots 4, 5 and part of 6.

Road between Lots 8 and 9 across Concessions 2 and 3, 6 culverts and 1 bridge, 30 ft. long, built, and 2 miles stumped and grubbed.

Road between Concessions 1 and 2, 3 miles stumped and grubbed across Lots 3 to 8 inclusive, 20 chains stumped, 5 chains graded and 500 cu. yds. of fill on approaches to bridge on Lot 9.

Township of Bond:

Road between Concessions 2 and 3, across Lot 2, 30 chains stumped and grubbed and 10 chains graded.

Road between Lots 2 and 3, across Concession 5, 20 chains stumped and grubbed and 44 chains graded.

Road across Lot 2 Concession 6, 10 chains cut stumped and ditched.

Township of Bowman:

Road between Lots 4 and 5, 6 chains ditched, 5 chains gravelled.

Road across Concession 4, Russel Creek bridge 30 ft. span repaired, Concession 5.

Road between Concessions 5 and 6, across Lot 7, 10 chains of muskeg regraded and covered with clay.

Road between Lots 2 and 3, across Concessions 4, 5, and 6, $2\frac{3}{4}$ miles graded, 7 culverts built and grades improved on 3 hills.

Road between Concessions 4 and 5, across Lots 11 and 12, 1 mile stumped and grubbed.

Road between townships of Bowman and Hislop, 1 bridge built, 30 ft. span.



Field of grain in Temiskaming.

Township of Carr:

Road between Lots 8 and 9, across Concessions 1 and 2, $1\frac{1}{4}$ miles graded.

Road on Lot 2, Concession 1, 1 bridge built, 20 ft. span.

Road on Lot 10, Concession 1, 1 culvert built and 20 chains regraded.

Road between Concessions 3 and 4, on Lots 1, 2 and 3, 2 bridges, 20 ft. span and 6 culverts built and 500 cu. yds. clay fill.

Road between Lots 2 and 3, 1 mile gravelled and 500 cu. yds clay fill on Concession 3, 2 miles regraded, 2 miles dragged across Concessions 3 and 4.

Road between Concessions 1 and 2, across Lot 5, $\frac{1}{2}$ mile graded and 3 culverts built.

Road between Lots 4 and 5, 2 miles regraded, $\frac{3}{4}$ mile stumped and grubbed across Concession 5.

Road between Townships of Carr and Beatty, 2 miles regraded.

Road between Townships of Carr and Bowman, 10 chains gravelled.

Road between Concessions 2 and 3, across Lots 1 and 2, 1 mile dragged.

Road between Concessions 5 and 6, across Lots 5, 6, 8, 9 and part of 7, $2\frac{1}{4}$ miles stumped and grubbed.

Road between Concessions 4 and 5, 1 mile cut, stumped and grubbed across Lots 5 and 7, $\frac{1}{2}$ mile cut, logged and burned across Lot 6.

Trunk Road on Concession 1, across Lots 7, 8 and 9, $\frac{1}{4}$ miles gravelled.

Road between North and South halves Lot 12, Concession 4, $\frac{1}{2}$ mile cut, stumped and grubbed.

Road between Lots 4 and 5, 30 chains stumped and grubbed and 29 chains graded across Concession 4.

Road between Concessions 4 and 5, across Lots 1 and 2, 58 chains graded and 2 culverts built.

Road between Townships Currie and Bond, 40 chains stumped and grubbed across Concession 4, and part of 2 miles burned across Concessions 5 and 6.

Township of Hislop:

Road between Concessions 5 and 6, across Lots 4, 5, 6 and 7, 2 miles regraded.

Road between Lots 9 and 10, 1 mile stumped, grubbed and graded, and 2 culverts built.

Road between Concessions 4 and 5, $\frac{1}{2}$ mile cut, stumped and grubbed and 4 culverts built on Lot 8. One mile graded across Lots 8 and 9.

Road between Lots 7 and 8, across Concession 4, 30 chains cut, stumped and grubbed.

Road between Lots 9 and 10, across Concessions 2 and 3, $1\frac{1}{8}$ miles cut and burned.

Road between Concessions 2 and 3, $\frac{3}{4}$ mile stumped, grubbed and burned across Lots 12 and 13, $\frac{1}{2}$ mile graded across Lot 13.

Township of Playfair:

Road between Lots 2 and 3, across Concession 5, 1 mile cut, logged and burned, $\frac{3}{4}$ mile stumped and grubbed.

Road across Lot 8, Concession 6, $\frac{1}{2}$ mile cut, stumped and grubbed.

Road between Lots 8 and 9, across Concession 6, 1 mile cut, stumped and grubbed.

Road between Concessions 5 and 6 on Lot 4, 80 cu. yds. filling at approach to bridge.

Township of Stock.

Road between Concessions 1 and 2, $1\frac{1}{2}$ miles cut and burned, across Lots 1, 2 and 3, 1 mile graded and 7 culverts built across Lots 1 and 2.

Township of Taylor:

Road between Concessions 2 and 3, road, culverts and bridges repaired, across Lots 1 to 6 inclusive, $\frac{1}{2}$ mile graded across Lot 7, $\frac{1}{2}$ mile stumped and grubbed across Lot 8.

Road between Lot 8 and 9, across Concession 2, 1 mile stumped and grubbed.

Road between Lots 10 and 11, across Concessions 3 and 4, 2 miles cut and logged.

Road between Townships of Taylor and Carr, $\frac{1}{2}$ mile regraded across Concession 2.

Township of Walker:

Road between Concessions 5 and 6, across Lots 10, 11 and 12, $1\frac{1}{2}$ miles cut and burnt.

Road between Concessions 3 and 4, across Lot 12, $\frac{1}{2}$ mile cut and burnt.

Road between Concessions 4 and 5, $\frac{1}{2}$ mile stumped and grubbed across Lot 12, 10 chains repaired Lots 10 and 11.

Road between Lots 10 and 11, across Concession 1, 50 chains cut and logged.

Road across Concession 2, 1 mile cut, stumped grubbed and graded.

Road on Lot 12, Concession 2, bridge built across Driftwood River and approaches filled.



A settler's first team in Temiskaming.

Township Boundaries:

Ten chains of crosslaying repaired between Walker and Clergue and roads repaired between the townships of Walker, Clergue, Stock and Bond.

Road to Lightning River, Mineral Belt, 35 miles cut to provide winter road and later repaired to make it passable as summer road, through township of Munro, McCool, Michaud and unsurveyed territory.

Road between townships of Currie and Taylor, old corduroy lifted, muskeg regraded and covered with clay across Lots 1 to 4 and 8 to 11, both inclusive.

Road between townships of Carr and Bowman, old corduroy lifted, muskeg regraded and covered with clay across Lot 12.

PORCUPINE DISTRICT.*Township of Delora:*

Road to Ankerite Mine in continuation of road under construction by township of Tisdale, $\frac{1}{2}$ mile graded and $\frac{1}{4}$ mile surfaced with rock.

Road between townships of Delora and Ogden, known as Hayden Road, 1 mile surfaced with gravel.

Township of Mountjoy:

Road South side of Mattagami River, scow at crossing repaired and location altered, 3 miles graded, 7 culverts built, 1,917 yds. ditched, 63 rods corduroy laid. One bridge built 16ft. by 60 ft. and 300 yds. surfaced with gravel.

Road East side of Mattagami River, $\frac{7}{8}$ mile graded, 400 yds. ditched, 2,330 cu. yds. earth fill, 3 culverts built.

Township of Tisdale:

Trunk Road, South Porcupine to Timmins, 4 miles repaired, 2 miles surfaced with rock and gravel.

Road from Golden City to South Porcupine via Pottsville on North side of Porcupine Lake, 1 bridge built 16 ft. by 90ft., approaches and piers filled with rock, 1,000 ft. of corduroy 8 ft. wide surfaced with rock, 200 ft. of corduroy laid, 4 large culverts built, 1 mile graded, 1,400 yds. ditched and $\frac{3}{4}$ mile of road repaired.

Township of Whitney:

Road from Golden City to South Porcupine along T. & N. O. Railway, $1\frac{1}{4}$ miles surfaced with rock and gravel and 3 culverts built.

ELK LAKE-GOWGANDA ROAD.

A satisfactory improvement on this road without a large expenditure is very difficult, the traffic is not extensive but the length of the road, some 28 or 30 miles, results in the drawing of exceedingly heavy loads, which, with narrow tires, cut the road down to a boulder bottom making travel upon it rough, uncomfortable and disagreeable.

First class gravel for road building is very scarce along the route of the road, so that no work approaching a permanent nature is possible without the use of crushed rock.

The work done upon the road was carried out under great difficulty owing to the labour shortage and unsuitable weather conditions. Several miles of the road were graded and surfaced with gravel, special attention given to drainage. Many of the old wooden culverts were replaced with steel culverts. The old bridge at Long Point was replaced by a smaller bridge and an extensive fill. At the 22 mile post, the old culvert with corduroy approaches was renewed and approaches filled in. The bridge at Miller Creek was replaced and proper approaches made.

Other work consisted of re-surfacing the worst places on the road and re-pairing the corduroy.

SWASTIKA-KIRKLAND LAKE ROAD.

General repairs were made along this road, about $\frac{3}{4}$ of a mile was graded and $1\frac{3}{4}$ miles surfaced with crushed rock. Twenty-four wooden culverts were replaced with steel culverts and the Lake Shore hill was reduced by the removal of about 350 cu. yds. of rock.

HAILEYBURY-NEW LISKEARD ROAD.

About 3,000 ft. of this road was graded and 7,000 ft. of water-bound Macadam was laid. Four new steel culverts were placed and on other parts of the road slight repairs were made in the way of grading and cleaning side ditches.

LORRAIN ROAD.

This work was done upon that part of the road lying North of the Green Meehan Mine, 2 culverts were replaced, 645 ft. of grading was done and 700 ft. surfaced with rock.

SUMMARY.

The following is a summary of work done during the season.

Old and new roads under construction or repair.....	273 miles
New roads under construction	110 "
New roads made ready for grading	86 "
Roads graded	71 "
Roads surfaced with rock or gravel	25 "
Bridges built or renewed	28
Culverts built or renewed	253

To the Honourable the Minister of Lands, Forests and Mines:—

SIR,—I beg to submit for your consideration and recommend that the following amounts be expended during the season of 1919 on the construction of new roads, the maintenance of lately constructed trunk roads, the re-surfacing with stone or gravel of old roads, the construction of bridges and culverts and the drainage of swamp lands in the Districts of Rainy River, Kenora, Port Arthur and Fort William, Sault Ste. Marie, Algoma, Sudbury, Nipissing, Parry Sound, St. Joseph Island and Muskoka:

District of Rainy River:

In the District of Rainy River there are not less than 125 miles of trunk roads to be maintained and dragged; 25 miles of constructed road requiring surfacing with gravel at different points throughout the District and 25 miles of new road to be constructed to meet the immediate requirements of the settlers; also a small expenditure in the mining section east of Rainy Lake. This work will cost approximately \$75,000

District of Kenora:

Repairing and maintaining old roads in the vicinity of Kenora and Keewatin, the construction of trunk roads between Dymont and Eagle River Stations along the Canadian Pacific Railway and along the Canadian Government Railway in the vicinity of Quibell and Superior Junction.. 45,000

District Surrounding Port Arthur and Fort William:

Maintenance of 150 miles of trunk roads, the construction of 30 miles of new roads east of Port Arthur and the surfacing with gravel of 10 miles of old roads, including also the mining road from Schreiber Station, Canadian Pacific Railway to Big Duck Lake now under construction 80,000

Sault Ste. Marie Trunk Road:

The construction of the 17 mile gap on the Sault Ste. Marie and Sudbury trunk road between Algoma Mills and Cutler and maintenance of the trunk road between Sault Ste. Marie and Algoma Mills 100 miles.. 75,000

Sudbury and Algoma Districts:

Re-grading and gravelling in places the Sudbury and Soo trunk road between Copper Cliff and Cutler 30,000

St. Joseph Island:

Completing the trunk road system on St. Joseph Island 15,000

Districts Surrounding the Sudbury Mining District:

Surfacing new road between Coniston and the Garson Mine, constructing and grading a new road between Capreol Station on Canadian Northern Railway and the Selwood Iron Mine on Canadian Northern Railway, maintenance of 50 miles of trunk roads, east, west and north of Sudbury 50,000

Nipissing Districts:

Construction of bridges, repairs and gravelling and new roads from Warren, Canadian Pacific Railway east to Mattawa on Canadian Pacific Railway 40,000

Districts of Parry Sound and Muskoka:

The extension of the North Bay and Toronto trunk road through the Districts of Parry Sound and Muskoka to a point south of Gravenhurst; also trunk road from Trout Creek Station on Grand Trunk Railway west to Loring; also the gravelling in places and maintenance of the North Bay trunk road from North Bay south to Huntsville and other roads in the vicinity 75,000

District of Nipissing:

The extension of the Mattawa and Pembroke trunk road from Mattawa east 50,000

Unforeseen work, repairing roads, bridges 30,000

Office and engineering expenses, equipment and new plant 30,000

\$595,000

J. F. WHITSON,

Commissioner.

Toronto, Ontario, January 15th, 1919.

To the Honourable G. H. Ferguson, Minister, Lands, Forests and Mines, Ontario:

SIR,—Under the provisions of the Acts of 1912 and subsequent amendment for the Development of Northern and North-western Ontario, I recommend for the construction, maintenance and repairs of roads and bridges the following expenditures, for the season ending October 31st, 1918.

In the territory served by the Temiskaming and Northern Ontario Railway from Latchford to Cochrane.

(1) From Latchford to Swastika including the Elk Lake and Charlton branches of the railway and the mining camps of Boston Creek, Kirkland Lake and Larder Lake	\$75,000
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(2) From Swastika to Monteith, this includes the area about Matheson, which is opening up so readily	50,000
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(3) From Monteith to Cochrane, including the Iroquois Falls branch and Porcupine branch of the railway as far as the Porcupine River	50,000
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(4) The Porcupine Mining District, including Mountjoy Township and the bridge over the Mattagami River	50,000
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In the territory served by the Canadian National Railways, from the Quebec boundary to Grant, and southerly along the Algoma Central Railway to Oba.

(1) From the Quebec boundary west to Fauquier including roads for Soldiers' and Sailors' Colony in Shackleton Township	50,000
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(2) From Fauquier to Grant including roads for Soldiers' and Sailors' settlement in O'Brien and Owens Townships	50,000
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Unforeseen expenditures	32,500
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\$357,500

All of which is respectfully submitted.

I have the honour to be, Sir .

Your obedient servant,

C. H. FULLERTON,

*Acting Director, Northern Development
Branch, Temiskaming District.*

REPORT OF ONTARIO GOVERNMENT CREAMERY, NEW LISKEARD,
ONTARIO.

To the Honourable, the Minister of Lands, Forests and Mines, Ontario:

SIR,—I beg to submit report of the Creamery from November 1st, 1917, to October 31st, 1918. As we expected a great many of the farmers took advantage of the ready market for their cream, and the steady cash revenue derived from the Creamery.

The past year we had two hundred and twenty-two take advantage of this, and upwards of nine hundred cows were furnishing cream to the Creamery, ranging in herds from two to ten cows. 272,834 lbs. cream were received which produced 67,937.3 lbs. fat, and 84,541 lbs. butter. \$33,015.09 was distributed among the farmers at the lower part of the Clay Belt. The average price paid for fat was 48.5 cents per pound, value of butter, \$38,768.71, average 46 cents per pound, a price that was never before realized in this part of the Province, taking into consideration the amount of butter made at the Creamery.

If this amount had been made into dairy butter farmers would not have realized more than twenty to twenty-five cents per pound, and no cash for their product.

The Matheson District expect to send cream from 150 cows this coming year, as the good railway facilities for shipping cream from points north of here, is a good advantage to the farmers. Milch cows have come in, in great numbers, and while not the kind we would like to see in every case, some very fine pure bred cows have been brought in.

I am starting a cow testing association in the spring in order to try and eliminate as far as possible, the star boarders that a number of the farmers have in their stables. Farmers are falling in line, and no doubt it will be a great success.

I have the honour to be, Sir,

Your obedient servant,

A. MACLACHLAN,

Manager.

SUMMARY OF EXPENDITURE FOR THE SEVEN YEARS ENDING 31ST OCTOBER, 1918.
Northern and Northwestern Ontario Development Fund.

Description.	Year ending 31st Oct., 1912.	Year ending 31st Oct., 1913.	Year ending 31st Oct., 1914.	Year ending 31st Oct., 1915.	Year ending 31st Oct., 1916.	Year ending 31st Oct., 1917.	Year ending 31st Oct., 1918.	Total Expenditure.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Sec. 1 (a). Works.....	.....	.....	2,100 00	.....	.....	.....	.....	2,100 00
Sec. 1 (b). Roads.....	193,082 80	1,081,172 28	791,443 08	582,914 80	513,533 75	485,493 33	633,821 43	4,281,461 47
Sec. 1 (d). Farms.....	.....	.....	9,035 11	8,075 68	10,125 53	18,181 52	9,551 96	54,969 80
Sec. 1 (e). Creamery, New Lis- keard.....	.....	.....	.....	.....	.....	15,624 86	7,822 39	23,447 25
Sec. 3 Seed Grain.....	.....	.....	.....	98,920 26	24,916 63	31 50	11,342 47	135,210 86
Returned Soldiers' and Sailors' Settlement Act, 1917, Clause 5	.....	.....	.....	.....	.....	138,812 05	466,276 09	605,088 14
Clause 9 (Amending Act 1916)	193,082 80	1,081,172 28	802,578 19	689,910 74	548,575 91	658,143 26	1,128,814 34	5,102,277 52
Settlers' Loan Account.....	.....	.....	.....	.....	26,370 98	370,731 99	43,524 83	440,627 80
	193,082 80	1,081,172 28	802,578 19	689,910 74	574,946 89	1,028,875 25	1,172,339 17	5,542,905 32

ARTHUR E. D. BRUCE,

Secretary and Accountant.

November 18th, 1918

STATEMENT OF EXPENDITURE UNDER NORTHERN & NORTHWESTERN ONTARIO DEVELOPMENT ACTS, 1912 AND 1915.

(From 23rd May, 1912, to 31st October, 1918.)

District	Expenditure year ending 31st Oct., 1918.
1. District of Nipissing, Parry Sound and Muskoka. North Bay to Callander; Petawawa to Pembroke; Callander to Utterson on G. T. Ry.; Powassan to Nipissing Village; North Bay to Markstay on Canadian Pacific Railway	\$44,061 07
2. District of Temiskaming. Haileybury, Englehart, Matheson, Charlton, Swastika, Elk Lake, Larder Lake	101,188 15
3. District of Temiskaming. Cochrane, Porcupine, Iroquois Falls, and Transcontinental Railway from Quebec boundary west 125 miles to Kapuskasing	165,828 66
4. District of Sudbury. Vicinity of the town of Sudbury and Mining District surrounding, and Sudbury-North Bay Trunk Road	57,468 39
5. District of Algoma. Vicinity of Hearst, along Transcontinental and Algoma Central Railways	22,680 97
6. District of Algoma, on Sudbury and Sault Ste. Marie Trunk Road, Sault. Ste. Marie to Algoma Mills	10,331 67
7. District of Thunder Bay. Tributary to Port Arthur and Fort William	82,724 52
8. District of Kenora. Vicinity of Kenora and Keewatin and between Wabigoon and Dryden and Oxdrift on Canadian Pacific Railway ..	14,234 31
9. District of Rainy River, in Rainy River Valley	69,480 59
10. Algonquin Provincial Park	13,722 79
11. Manitoulin Island	16,151 51
12. St. Joseph Island	17,960 99
13. Experimental Farm Plots	9,551 96
14. Creamery, New Liskeard	7,822 39
15. Seed Grain	11,342 47
16. General Administration Expenses	17,987 81
	<hr/>
17. Soldiers' Settlement Account	\$662,538 25
18. Settlers' Loan Account	466,276 09
	<hr/>
	\$1,172,339 17

ARTHUR E. D. BRUCE,

Secretary and Accountant.

STATEMENT OF EXPENDITURE, YEAR ENDING 31ST OCTOBER, 1918.

Making of Roads:

Grigg, A., Deputy Minister, salary	\$400 00	
Whitson, J. F., Commissioner, salary	4,500 00	
Bruce, A. E. D., Secretary and Accountant, salary	3,000 00	
Beardall, F. G., Clerk (allowance on military leave)	1,335 00	
Dower, A. R., Clerk (allowance on military leave)	935 00	
Reid, A., Clerk (allowance on military leave)	728 92	
Lawer, W. L., Bookkeeper, salary	1,475 00	
Laidlaw, Miss B., Stenographer, salary	867 50	
Extra Clerks	4,746 39	
	<hr/>	17,987 81
Wages	\$342,957 34	
Contracts	109,020 97	
Supplies and equipment	163,855 31	
	<hr/>	615,833 62
		<hr/>
		\$633,821 43

Advancement of Settlement and Colonization:

Wages	\$4,603 46	
Contracts	620 00	
Supplies, stock and equipment	4,328 50	
		9,551 96

Creamery at New Liskeard:

Wages	\$2,485 06	
Contracts	528 00	
Supplies and equipment	4,809 33	
		7,822 39

Seed Grain:

Wages	\$195 82	
Seed, freight and expenses	11,146 65	
		11,342 47

*Returned Soldiers' and Sailors' Land Settlement Act—**Monteith and Kapuskasing:*

W. G. Nixon, Superintendent, salary	\$2,166 67	
Wages	149,405 93	
Contracts	85,797 75	
Construction of settlers' houses and other buildings, railway siding, equipment and supplies	228,905 74	
		466,276 09
		\$1,128,814 34

Settlers' Loan Department:

Dane, F., Commissioner, salary	\$5,000 00	
Kennedy, W. K. P., Accountant, salary	2,500 00	
Crawford, Miss G., Stenographer, salary	732 50	
		\$8,232 50
Net amount of loans issued	\$34,817 43	
Expenses	474 90	
		35,292 33
		43,524 83
		\$1,172,339 17

ARTHUR E. D. BRUCE,
Secretary and Accountant.

SPECIAL WARRANT ACCOUNTS.

ADMINISTERED BY THE NORTHERN DEVELOPMENT BRANCH.

EXPENDITURE TO 31ST OCTOBER, 1918.

Order-in-Council dated 30th September, 1916—

Erection of log house at Ottawa Exhibition	\$1,776 50	
Free Seed Grain for seeding down burnt lands	9 63	
Erection of Stock Judging Pavilion, New Liskeard	20,132 09	
		\$21,918 22

Part of Order-in-Council, 10th October, 1916—

Erection of schools at Matheson and Porquis Junction (Bal- ance refunded to Provincial Treasurer)		15 08
--	--	-------

Order-in-Council dated 20th February, 1917—

Cost of rams purchased (19)	\$565 00	
Expenses and freight	29 88	
		594 88

Order-in-Council dated 18th May, 1917—

Purchase of horses and other live stock		
Cost of 40 cattle and expenses in connection therewith		4,780 05

Order-in-Council dated 18th May, 1917—

Returned Soldiers' Recreation Account—Expenditure, 1918	1,193 73
Order-in-Council dated 11th December, 1917.	
Relief of sufferers in Halifax disaster; purchase of glass, beaver board, tar paper, sheets and pillow cases	20,996 96
	<u>\$49,498 92</u>

REVENUE ACCOUNT, 1918.

<i>The Making of Roads:</i>	
Refund on bridges and sale of supplies and stock	\$3,357 96
<i>Advancement of Settlement and Colonization:</i>	
Sale of pulpwood, produce, etc., and rent	2,369 21
<i>Creamery at New Liskeard:</i>	
Sale of butter, cream, cans, etc.	5,068 88
<i>Seed Grain:</i>	
Notes retired and cash paid	12,853 86
<i>Returned Soldiers' and Sailors' Land Settlement Act:</i>	
Sale of provisions, supplies, board and equipment, etc....	43,499 99
<i>Special Warrant Accounts:</i>	
Sales and refunds	5,647 68
	<u>\$72,797 58</u>
<i>Settlers' Loan Account:</i>	
Payments on principal, interest and refunds	45,184 63
<i>Total Revenue under all heads, 1918 Account</i>	<u>\$117,982 21</u>

NORTHERN DEVELOPMENT BRANCH.

SEED GRAIN.

Amount refunded by Settlers for Seed Grain Supplied.

Oct. 31st 1915, by notes retired and cash paid	\$3,171 36
Oct. 31st, 1916, by notes retired and cash paid	29,320 00
Oct. 31st, 1917, by notes retired and cash paid	18,119 04
Oct. 31st, 1918, by notes retired and cash paid	12,853 86
	<u>\$63,464 26</u>
Total refunded, 4 years ending 31st October, 1918	

RECORD OF CORRESPONDENCE.

For year ended 31st October, 1918.

Letters received	8,203
Letters mailed	6,202
Circulars mailed	1,348
	<u>7,550</u>

ARTHUR E. D. BRUCE,
Secretary and Accountant.

Appendix No. 31.

REPORT OF THE FORESTRY BRANCH, 1918.

SIR,—The report of the work of the Forestry Branch for the year ending 31st October, 1918, falls into the three sections of Forest Protection, Reforestation, and Tree Diseases.

I. FOREST PROTECTION.

(1) *Legislation.*

The only change in The Forest Fires Prevention Act, under which forest protection is carried on, is an amendment passed at the last session of the Legislative



1—Type of light truck used by the Forestry Branch in fire protection service.

Assembly which provides for arrangements with an owner for additional protection. In such cases the Minister appoints extra rangers who are paid by the owner of the land, the remuneration to be approved by the Minister. Under this amendment four extra rangers were appointed this season.

(2) *Organization and Personnel.*

Some re-arrangement of district boundaries was made involving consolidation in five cases and sub-division in two others, resulting in a reduction of the Chief Ranger Districts to 32. An additional Inspector was appointed, making four inspectorates of the Province, with headquarters at Cochrane, Nipigon, Sudbury and Parry Sound. The number of Deputy Chief Rangers, whose duties are entirely supervisory, was increased to 41 this season. With 32 Chiefs this pro-

vided for direct field supervision on the basis of one to every 15 rangers. The Inspectors, working under the Superintendent, form the connecting link between the field and head office.

The spring opened early and being continuously dry the fire season opened much earlier than in 1917. April pay lists totalled 212 names and May, 1,002 names, as compared with 84 and 828 respectively in 1917. Moreover, the May pay list was for the full month in most cases. In addition it was found necessary to raise the general scale of rangers' wages throughout by 25 cents per day, thus increasing the season's pay roll expenditure by 10 per cent. This was partly offset by the wet weather in September allowing of a curtailment. The number of names appearing on the monthly pay lists was: April, 212; May, 1,002; June, 1,094; July, 1,117; August, 1,047; September, 929; October, 27. Of this number, 538 rangers were on the force of 1917. The pay roll for the whole field force for the season amounted to around \$416,500. The other main items of expenditure were, in round figures: equipment, \$28,350; expendable property, \$10,700; travelling expenses on inspection work, \$13,440; improvement work, \$1,280; extra assistance for fire fighting, \$1,445; express, freight, cartage, telephone and telegraph tolls, etc., \$5,365.

In connection with the protection of forest land under license, the Department receives from the licensees recommendations for fire rangers. On this basis, some 218 rangers were appointed for 1918 on the recommendation of 90 licensees for 10,050 square miles, an average of 46 square miles (29,440 acres) per ranger. The licensed area protected totalled approximately 16,900 square miles, representing some 255 licensees.

(3) *Records.*

This season Chief Rangers were required to submit a report weekly covering all phases of the work in their district. Rangers keep a daily diary, using a prescribed blank form, and these diaries are forwarded to Head Office monthly. Operators of railway motor cars, automobiles and boats, send in a weekly report showing movements and mileages each day with consumption of gasoline and oil. A system of property accounting has been instituted in connection with the recommendation of accounts for payment in Head Office. A card system has been inaugurated for recording cost of protection in each chief ranger district, together with a classification of the expenditures.

(4) *Fires.*

The weather during the fire season of 1918 was abnormal in several respects. March was a comparatively mild month, as also was April with a mean temperature 2.5 degrees above normal. In addition April was unusually dry throughout. May provided some exceptionally hot weather, so that on the whole the mean monthly temperature was 5 degrees above normal. On top of this the rainfall was below the average. As a result the patrol force had to be sent out about two weeks earlier than usual, and practically brought up to the maximum number the first week in May. Thus there were 212 and 1,002 rangers in April and May respectively on duty as compared with 84 and 828 in 1917. The summer months were conducive to a low fire risk with the exception of two very hot dry weeks in August. With the exception of the western end of Ontario, September rains were frequent and heavy, and it was possible to call off the patrol by the 15th in many districts and around the 20th in the southern ones. The season as a whole was distinctly favourable for fire control.

Classification of Forest Fires, 1918

By Month			By Origin			By Size		
1918		1917	1918		1917	1918		1917
	No.	No.		No.	%		No.	%
April.....	79	449	Settlers.....	78	8.1	1/4 ac. and under....	391	40.5
May.....	215		Campers.....	79	8.2	Over 1/4 to 5 ac.....	325	33.7
June.....	273	320	Railways.....	449	46.5	Over 5 to 10 ac.....	58	6.0
July.....	124	158	Lightning.....	37	3.8	Over 10 to 100 ac....	131	13.6
August....	268	117	Indians.....	14	1.5	Over 100 to 500 ac..	49	5.1
September.	6	66	Logging oper..	40	4.1	Over 500 ac.....	11	1.1
			Miscellaneous	44	4.6			
			Unknown.....	224	23.2			
	965	1110		965	100.0		965	100.0

Railway Fires.—As in 1917, nearly one-half (46.5 per cent.) of the total number of fires for the season was of railway origin, that is to say, to defective locomotives or carelessness on the part of railway employees. The unsatisfactory condition of fire protective appliances on locomotives is evident from the statement regarding locomotive inspection farther on in this report. Along with this it must be remembered that right-of-way conditions are at least equally as important as the maintenance standard of locomotives from the standpoint of forest fire hazard.

It must be clearly kept in mind that by “railway fires” are meant specifically those of railway origin. The term does not by any means include all those fires occurring along railway lines. Thus, this season, 538 fires were reported as starting on the right-of-way or immediately adjacent thereto. As to cause, these were classified thus: due to railways, 449; other known causes, 19; of unknown origin, 70; that is to say 89 fires or 16.5 per cent. of those along railway lines were not charged to railway operation.

STRICTLY RAILWAY FIRES, 1918

Railway	Mileage through Forest Section	No. Fires	Per cent of total fires
C.N.R.	1,455	114	25.4
C.P.R.	1,430	112	24.9
C.G.R.	950	98	21.8
G.T.R.	375	60	13.4
T. & N.O.	312	47	10.5
A.C.	330	5	1.1
A.E.	85	13	2.9
	4,940	449	100.0

In the case of all the above lines the majority of the fires were reported from a comparatively small percentage of the total mileage concerned. Thus of the 114 Canadian Northern fires, 29, 24, 14 and 10 fires occurred on the Ruel, Muskoka, North Bay and Maynooth subdivisions respectively; that is to say, two-thirds of the fires happened on 4 out of the 13 subdivisions. Likewise in the case of

Canadian Pacific Railway, the Nemegos subdivision with 35 fires, Mactier with 28, North Bay with 14, and Parry Sound with 10 fires, accounted for over three-quarters of the 112 Canadian Pacific fires.

Other Causes.—After the railways the careless camper was the cause of the next largest number of fires, namely, 9.7 per cent. of the total (including Indians), as against 14 per cent. last season.

Land clearing operations by settlers caused 78 fires or 8.1 per cent. of the total. Of these, 50 fires were outside, and 28 fires inside, the permit area. Of the latter, 17 were cases of fires set out under permit getting beyond control, and 11 were cases of violations of the Permit Regulations, half of them instances of



2—Forest planting on sand lands at the Provincial Forest Station, Norfolk County, 1909.

misunderstanding. Prosecutions were conducted in 5 cases and convictions secured in all.

Forty fires were connected with logging operations. These included carelessness of river drivers, cleaning up around camps, and defective logging locomotives.

Area Burned.—Forty per cent. of all fires did not exceed one-quarter acre in size, and nearly three-quarters of them did not get beyond 5 acres in extent.

The total area burned over was 30,172 acres, classified thus:

Timbered land, 4,757 acres (15.8 per cent.); cut-over land with some timber left, 11,174 acres (37.0 per cent.); young growth, 7,100 acres (23.5 per cent.); barren and grass land, 7,141 acres (23.7 per cent.) It must again be pointed out that cut-over land and young growth, as representing the forest land that has been logged over with the resultant hazardous slash, constituted 60 per cent. of the total burned over area.

STATEMENT OF FOREST FIRES, 1918

District	Number of fires	Timber land mainly coniferous (i.e. softwood)	Timber land mainly hardwood	Cut-over land, some softwood left	Cut-over land, some hardwood left	Young growth mainly coniferous	Young growth mainly hardwood	Barren land	Grass land	Totals (acres)
I. Western Inspectorate—										
1 Kenora District.....	21	403	.....	985	.....	7	.....	1	.....	1,396
2 Rainy River.....	47	327	100	575	1,920	10	7	555	27	3,521
3 Thunder Bay.....	65	98	.....	321	486	188	100	406	61	1,660
4 Nipigon.....	11	1	.....	.....	.....	.....	611	.....	7	619
5 C.G.R.—Western.....	77	.....	.....	2	.....	20	.....	89	8	119
6 C.G.R.—Central.....	18	.....	.....	.....	.....	2	.....	.....	2	4
II. Northern Inspectorate										
1 Hearst.....	13	.....	.....	1	.....	.....	.....	.....	2	3
2 Cochrane.....	35	.....	.....	87	.....	.....	110	11	11	219
3 Abitibi.....	7	.....	.....	11	4	.....	.....	6	.....	21
4 Timmins.....	18	370	.....	113	18	301	.....	76	.....	878
5 Matheson.....	24	.....	.....	36	.....	10	43	9	.....	98
6 New Liskeard.....	16	15	.....	555	.....	10	100	430	.....	1,110
III. Central Inspectorate—										
1 Soo.....	13	320	.....	.....	850	20	5	1,283	30	2,508
2 Webbwood.....	23	.....	78	.....	35	10	45	436	57	661
3 Sudbury.....	42	.....	.....	29	.....	48	441	8	7	533
4 Sturgeon Falls.....	8	.....	.....	.....	320	.....	.....	2	.....	322
5 North Bay.....	34	27	14	1	1	.....	154	733	5	935
6 Mississagi.....	11	31	.....	.....	2	1	.....	.....	.....	34
7 Chapleau.....	59	53	26	746	.....	166	8	68	14	1,081
8 Foleyet.....	46	453	.....	1,517	.....	234	.....	5	4	2,213
9 Timagami, West.....	1	.....	.....	2	.....	.....	.....	.....	.....	2
10 Timagami, South.....	17	150	.....	40	400	2	.....	6	2	600
11 Timagami, East.....	10	1	.....	.....	.....	7	.....	.....	.....	8
12 Timagami, North.....	6	2	.....	.....	.....	4	.....	3	.....	9
13 T. & N.O., South.....	27	.....	.....	.....	.....	.....	.....	.....	5	5
IV. Southern Inspectorate—										
1 Parry Sound.....	33	13	.....	513	47	.....	.....	127	317	1,189
2 Muskoka.....	91	90	38	55	750	114	586	1,394	51	3,078
3 Algonquin, North.....	46	160	800	9	150	225	1,552	374	10	3,260
4 Algonquin, South.....	79	503	575	63	5	25	608	209	27	2,015

5	Madawaska	8	.....	.....	.....	175	3	10	3	191
6	Trent	54	106	3	.....	525	737	223	26	1,838
7	Eastern Reserve	5	.....	.....	.....	.....	41	1	.....	42
Totals		965	3,123	1,634	.....	5,513	5,303	6,465	676	30,172
1917 Totals		1,110	73,160	135	.....	2,163	13,202	82,959	2,334	384,164



3—Plantation on sand lands of Jack Pine and Scotch Pine, one year after planting.



4—Same plantation as shown in Fig. 3, after three seasons' growth.

(5) *Permits.*

The issuance of permits to settlers to set out fire for clearing land is practically confined to the townships based on the T. & N. O. railway between Cobalt and Cochrane and the C. G. R. from Cochrane to Hearst. In all there were issued 9,590 permits covering 39,683 acres, an average of slightly more than 4 acres per permit, as compared with 3,486 permits for 15,186 acres in 1917. The administration of the permit regulations called for a large number of special rangers, as permits were issued in 136 townships. The following classification shows still further the scattered nature of the permit work:

Twps. in which there were issued.	No. Twps.
Not over 25 permits	71
26 to 50 permits	13
51 to 100 permits	21
101 to 200 permits	20
201 to 300 permits	7
Over 300 permits	4

The majority of the permits, however, were issued in 5 Chief Ranger Districts, as follows:

District	No. of Permits	Area Burned over
Cochrane	3,493	10,267 acres
Matheson	2,346	7,371 "
New Liskeard	2,179	17,868 "
Timmins	651	1,971 "
Hearst	514	1,134 "

The remaining 19 Districts in which permits were issued accounted for but a little more than 4 per cent. of the total number of permits and slightly less than 3 per cent. of the area.

The permit work was heaviest in the following townships:

C'Brien	782 permits	Pacaud	205 permits
Olute	726 "	Kendall	188 "
Glackmeyer	507 "	Armstrong	185 "
Hislop	301 "	Bowman	178 "
Calder	263 "	Carr	175 "
Lamarche	255 "	Dymond	166 "
Fauquier	246 "	Hilliard	161 "
Harley	245 "	Newmarket	159 "
Mountjoy	220 "	Playfair	157 "
Kearns	218 "	Shackleton	149 "

Summary of Permits, 1918

Month	Number	Area
April	29	69
May	2,219	10,940
June	2,899	12,012
July	2,050	7,724
August	2,156	8,339
September	237	599
	9,590	39,683 acres

The administration of the Regulations in the Permit Area has been quite satisfactory this season. But 28 fires were reported as originating from settlers' clearing operations within the Permit Area. Of these, 17 were due to fires set out under permit and escaping from control, burning over 420 acres. The other 11 fires were cases of transgression of the Permit Regulations, some of them where permits had lapsed, the settler not clearly understanding the provisions. Five prosecutions were made and conviction registered in all.

(6) *Improvement Work.*

The new projects carried out this season were:

New trails constructed	304 miles
Rangers' cabins, 12 ft. by 16 ft.	58
Boat houses	2
Lookout towers	12
Railway motor car house	1
Auto garage	1
Nipigon storehouse, boathouse and office.	

The improvement work was carried out largely with ranger labour, the total cost being \$4,280.

(7) *Equipment.*

The major items of equipment added this year were as follows: Five Ford auto trucks; five portable fire pumps; six large boats; three railway motor cars; thirty-six railway velocipedes; one hundred tents; sixty-five canoes; blankets, 1,835 pounds.

The usual fire signs were sent out, together with 10,000 copies of a new sign. Two thousand large calendars were distributed for educational effect. A booklet of General Instructions for all field officers was prepared and sent out.

(8) *Railway Inspection Under B.R.C.*

A change was made this year in the handling of the work of the Board of Railway Commissioners for Canada. The special position of B.R.C. Inspector was abolished, and the Board work added to the duties of the Chief Rangers, with the exception of inspection of fire protective appliances on locomotives. This part of the work was looked after by two inspectors who devoted their whole attention to it, because, as already pointed out, approximately half of Ontario's forest fires for the past two seasons, have been of railway origin. The locomotive inspection facts are tabulated below.

Locomotive Inspections, 1918

Railway	Number Inspected					Total Number Locomotives	Total Number Inspections	Inspections Showing Defects	Percentage Defective	Cost per Inspection
	Times									
	1	2	3	4	5					
C.P.R.	119	73	40	12	3	247	448 (328)*	163 (64)	36.4 (19.5)	
C.N.R.	80	26	14	12	2	134	232 (154)	52 (61)	22.4 (39.6)	
G.T.R.	75	30	12	2	1	120	184 (60)	52 (12)	28.3 (20.0)	
A.C.	14	3	4	1	..	22	36 (37)	14 (17)	38.8 (45.9)	
A.E.	1	5	..	1	1	8	20 (36)	14 (20)	70.0 (55.5)	
						531	920 (615)	295 (174)	32.1 (28.3)	\$2.59

*Number in brackets are corresponding figures for 1917.

In all, 920 inspections were made of 531 locomotives at 37 different points, and of these, 295 inspections or almost one out of every three showed conditions below the standard requirements of the Board as regards fire protective appliances. Some of these were minor defects to be sure, but the showing on the whole is decidedly unsatisfactory. The average percentage of defective locomotives is higher than last season, and higher in the case of nearly all the railway systems. Percentically, the Canadian Northern shows a great improvement over last year. But the percentage defective does not present the whole situation as regards starting forest fires, for while the C.N.R. engines showed an improvement in conditions and the C.P.R. made a poorer showing (as compared with the previous season) yet the two lines this year showed respectively 114 and 112 fires of railway origin on practically equal mileages through forest section. The explanation lies mainly in the right-of-way conditions which are admittedly bad along the C.N.R. With the cessation of war and freer labour conditions we can expect an improvement in this phase of the work next year.

As in past seasons, the Chief Fire Inspector of the B.R.C. laid down certain requirements as regards patrol by the railway companies along their lines. In so far as special patrolmen for forest fire protection purposes are concerned, the requirements relate mainly to the C.N.R. Twenty-six special patrolmen were called for between Pembroke and Nipigon by the Board's order, but this requirement was not lived up to by the company in anything like a thorough manner. The same unsatisfactory state of affairs has obtained in the past, and it would appear that the only solution will be for the Forestry Branch to put on the patrol.

The co-operative arrangement on the part of the Temiskaming and Northern Ontario Railway Commission in 1917, whereby their locomotives were regularly inspected by us, was continued this season. One hundred and twenty-six inspections of 39 locomotives were made, of which 42 or exactly one-third showed defects.

Ten locomotives used in logging, etc., were required to be brought up to the equivalent of B.R.C. specifications.

The annual statistical report made to the Chief Fire Inspector of the B.R.C. follows:

**STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES IN
ONTARIO FOR THOSE LINES SUBJECT TO THE JURISDICTION OF THE BOARD
OF RAILWAY COMMISSIONERS FOR CANADA. SEASON, 1918.**

	G. T. R.	C. P. R.	C. N. R.	A. E.	A. C.	Totals	1917 Totals
(a) Railway Fires:							
1. Number, by causes:							
(a) Locomotives, Class A fires	16	18	63	3	4	104	17
Class B fires	41	86	40	1	5	173	119
(b) Employees, Class A fires	.....	.....	2	1	3	6	3
Class B fires	3	8	9	.....	1	21	14
(c) Total of Class A fires....	16	18	65	4	7	110	20
Total of Class B fires....	44	94	49	1	6	194	133
Total of Railway fires....	60	112	114	5	13	304	153
2. Areas burned:							
(a) Young forest growth, acres	203½	264½	293	.....	2	763	338
(b) Timber land	29	256	466	.....	3	754	110½
(c) Slashing or old burn....	637½	2,253½	1,985	.....	44½	4,920¾	5,069¾
(d) Other classes of land	77½	307½	38	40	.....	463¾	733¾
(e) Total	947¾	3,031¾	2,782	40	49½	6,901	6,251½
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	20 00	497 50	1,051 00	.....	1 00	1,569 50	121 00
(b) Standing timber.....	249 00	771 75	3,588 50	.....	70 00	4,679 25	263 00
(c) Forest products	693 75	.....	39 00	.....	.....	732 75	.....
(d) Other property	1,774 30	296 15	1,166 00	131 50	75 00	3,442 95	874 75
(e) Total	2,737 05	1,565 40	5,844 50	131 50	146 00	10,424 45	1,258 75
(b) Known Causes other than Railway Systems.							
1. Number due to:							
(a) Campers and Travellers							
Class A fires	.....	1	2	.....	.....	3	.....
Class B fires	.....	.....	1	.....	.....	1	.....
(b) Settlers, Class A fires	.....	.....	.....	.....	.....	.....	1
Class B fires	.....	.....	1	.....	.....	1	2
(c) Other known causes,							
Class A fires	.....	.....	5	.....	.....	5	.....
Class B fires	.....	.....	2	.....	1	3	4
(d) Total of Class A fires....	.....	1	7	.....	.....	8	1
Total of Class B fires....	.....	.....	4	.....	1	5	6
Total of other known causes.....	.....	1	11	.....	1	13	7
2. Areas burned:							
(a) Young forest growth....	.....	.....	25	.....	.....	25	.....
(b) Timber land.....	.....	.....	2	.....	.....	2	.....
(c) Slashing or old burn	.....	.....	60	.....	.....	60	505½
(d) Other classes of land	.....	.....	1	.....	½	1½	½
(e) Total	.....	.....	88	.....	½	88½	505½
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	.....	.....	40 00	.....	.....	40 00	.....
(b) Standing timber.....	.....	.....	30 00	.....	.....	30 00	.....
(c) Forest products	.....	.....	7,000 00	.....	.....	7,000 00	240 00
(d) Other property	.....	.....	10,174 00	.....	.....	10,174 00	.....
(e) Total	.....	.....	17,244 00	.....	.....	17,244 00	.....

STATISTICAL REPORT OF FIRES ORIGINATING WITHIN 300 FEET OF RAILWAY LINES
IN ONTARIO, ETC.—Continued.

	G. T. R.	C. P. R.	C. N. R.	A. E.	A. C.	Totals	1917 Totals
<i>(c) Fires of Unknown Origin:</i>							
1. Number:—							
(a) Total of Class A fires....	1	6	3	1	.....	11	12
(b) Total of Class B fires....	2	18	11	.....	3	34	52
(c) Total of all unknown fires	3	24	14	1	3	45	64
2. Areas burned:—							
(a) Young forest growth....	1	80	5	.....	.....	86	31
(b) Timber land .....	.....	6	.....	.....	.....	6	14
(c) Slashing or old burn.....	5	739½	163	.....	2	909½	6,844½
(d) Other classes of land .....	.....	40½	6½	3	1½	51½	176½
(e) Total	6	865½	174½	3	3½	1,052½	7,066½
3. Value of property destroyed.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	5 00	.....	.....	.....	.....	5 00	7 00
(b) Standing timber .....	.....	.....	.....	.....	.....	.....	108 00
(c) Forest products .....	.....	.....	.....	.....	.....	.....	2,482 70
(d) Other property .....	.....	30 00	280 00	.....	.....	310 00	555 00
(e) Total	5 00	30 00	280 00	.....	.....	315 00	3,152 70
<i>(d) Grand Totals for all Causes:</i>							
1. Number:—							
(a) Total of all Class A fires.	17	25	75	5	7	129	33
(b) Total of all Class B fires.	46	112	64	1	10	233	191
(c) Total of all fires reported	63	137	139	6	17	362	224
2. Areas burned:—							
(a) Young forest growth....	204½	344½	323	.....	2	874	369
(b) Timber land	29	262	473	.....	3	767	124½
(c) Slashing or old burn.....	642½	2,992½	2,208	.....	44½	5,887½	12,420½
(d) Other classes of land	77½	348½	45½	43	1½	515½	910½
(e) Total	953½	3,947½	3,049½	43	51½	8,044½	13,823½
3. Value of property destroyed:	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
(a) Young forest growth....	25 00	497 50	1,091 00	.....	1 00	1,614 50	128 00
(b) Standing timber	249 00	771 75	3,618 50	.....	70 00	4,709 25	371 00
(c) Forest products	693 75	.....	7,039 00	.....	.....	7,732 75	2,722 75
(d) Other property	1,774 30	326 15	11,620 00	131 50	75 00	13,926 95	1,429 75
(e) Total	2,742 05	1,595 40	23,368 50	131 50	146 00	27,983 45	4,651 45

II. REFORESTATION.

The work of this Branch in connection with reforestation during the past season has been chiefly concerned with the Provincial Forest Station in Norfolk County.

This Station was established with the following objects in view. To develop a Provincial nursery where forest nursery stock could be grown for distribution to prospective planters throughout Ontario. Also to demonstrate the feasibility of reclaiming worthless lands by reforestation, and to experiment with the various species of forest trees in relation to this work.



5—View of eight-year-old Jack Pine planting. This is the 1909 planting as shown in Fig. 2.

The following is a list of the stock grown in the nurseries at the Station in Norfolk County:

Scotch Pine (<i>Pinus sylvestris</i>), seedlings	300,000
Scotch Pine (<i>Pinus sylvestris</i>), transplants	97,000
Larch (<i>Larix europaea</i>), seedlings	80,000
Jack Pine (<i>Pinus divaricata</i>), seedlings	51,200
White Cedar (<i>Thuja occidentalis</i>), transplants	41,000
White Spruce (<i>Picea canadensis</i>), transplants	28,300
White Pine (<i>Pinus strobus</i>), transplants	20,000
Red Pine (<i>Pinus resinosa</i>), transplants	5,200
Austrian Pine (<i>Pinus austriaca</i>), transplants	4,500
Miscellaneous conifers	2,500
White Elm (<i>Ulmus americana</i>)	14,300
Sugar Maple (<i>Acer saccharum</i>)	11,600
Black Walnut (<i>Juglans nigra</i>)	5,150
Butternut (<i>Juglans cinerea</i>)	5,000
Manitoba Maple (<i>Acer negundo</i>)	2,700
White Ash (<i>Fraxinus americana</i>)	2,700
Tulip (<i>Liriodendron tulipifera</i>)	2,500
Hackberry (<i>Celtis occidentalis</i>)	2,500
Chestnut (<i>Castanea dentata</i>)	1,900
Miscellaneous hardwoods	3,700
Total	681,750

During the past season fifty acres of scrub oak lands were underplanted with white pine. The older plantations are thriving and some very interesting comparisons in the rate of growth of the various species can be shown.

Very little demand has been made by the public for planting material during the past season. This lack of demand is probably caused by abnormal labour conditions. During this season we shipped 100,000 plants to other parts of the Province for experimental planting.

A preliminary survey of the sand dunes in Prince Edward County was made with a view to reforestation. This sand formation presents a different problem from that in Norfolk. The formation is made up of sand ridges with very little vegetation left. These ridges are shifting, forming dunes which will be more difficult to control than the blowing sand on level areas.

III. TREE DISEASES.

The work on White Pine Blister Rust has been followed up this season along lines indicated in previous reports.

As indicated last season the stage of the disease found on Ribes (currants and gooseberries) is found throughout the older portion of the Province. Its distribution is so widespread that no methods of general eradication seem possible. Scouting done in the Rainy River, Sudbury and Temiskaming Districts failed to show that the disease had spread into these regions. It was found at points in Renfrew County and it is evident that it will gradually work northward unless some means of eradication are developed.

It has been found that white pine is practically safe if the Ribes are eradicated within a few hundred yards of the pine. Following upon this theory we have started the work of eradicating all Ribes from the Provincial Forest Station in Norfolk where white pine is one of the important species. This seems feasible where isolated blocks of white pine exist as in woodlots of Southern Ontario.

This season's results in eradicating Ribes on the Norfolk area will impress upon the layman the difficulty of carrying out this policy in our wild lands to the north.

One field crew of four men working over a period of four months eradicated 28,195 plants on an area of about 100 acres, while this area was abnormal and contained more *Ribes* than usual it indicates the impossibility of carrying on such work over large areas of wild land.

For a number of years enquiries have been coming into the Department regarding the diseased condition of white pine throughout the pine areas of Northern Ontario. White pine has been our most important timber tree but it seems to have many enemies. Following your advice the Forestry Branch is making a special study of this problem. The whole policy of handling white pine forests may be influenced by such a study.

Following instructions from this Department, Dr. J. H. Faull, of the University of Toronto, a specialist in plant pathology has undertaken a special study of these problems and you will find his preliminary report appended:



6—Mixed plantation of Scotch Pine and Larch made in 1912 at the Provincial Forest Station.

Preliminary Report of Dr. J. H. Faull:

“The science of forest pathology deals with the health of the forest and that of its products; therefore, the forest pathologist is concerned with the welfare of the standing timber and of the nursery, with the preservation from decay of converted timber, with the prevention of discoloration in lumber and in pulp, and with the exclusion of destructive foreign diseases. Some of the problems in this field have been solved and the results made applicable with monetary advantage—thus it has been discovered that decay is caused by fungi, and that ties, posts and structural timber can be profitably treated so as to guard against the invasion of these wood-destroying agents, further that discoloration in lumber and in pulp is due to certain molds which can be warded off at slight expense, and

that quarantine legislation combined with intelligent inspection can be made effective against the intrusion of foreign diseases. But many problems remain unsolved, notably those of the forest with its multiplicity of unstudied diseases and difficulty controlled situations; and it is just here that destruction—perhaps greater than in the case of fire—goes on unceasingly, especially in over-mature stands, or improperly harvested limits, taking a toll of millions every year.

Considerable advance in this direction has been made in Europe with its regulated forests and long-trained experts, but in America where conditions are very different forest pathologists have only in recent years undertaken investigations on the diseases of our vast virgin forests. Naturally such investigations constitute a *sine qua non* first step towards the solution of our own peculiar problems, for we must become acquainted with the diseases of our forests, their



7—Fifty-acre block of Scotch Pine planted in 1911 at Provincial Forest Station.
Trees now six to eight feet high.

nature, distribution, and relative importance before any important contribution can be made to that essential body of information on which Government and lumbermen base progressive action with reference to conservation or control of the forest.

Work of 1918.

The work of the past summer (1918) was centred mainly on a malady of the white pine known as "needle blight," but in addition two cases of pulp blackening were examined and its cause and prevention indicated, two cases of alleged injury to white pine and other species from fumes were reviewed, and a general survey of the timber diseases of the Timagami Forest Reserve (including an extensive collection) was undertaken.

In response to many complaints from Northern Ontario that the white pine was suffering from a yellowing of the foliage I was directed by the Forestry



8—Sand lands in Prince Edward County which were once covered with timber.



9—Sand dune encroaching on plowed field.

Branch to visit the Timagami Forest Reserve where the affection appeared to be particularly severe, and to make an investigation of its cause and its seriousness. Reference to Washington, D.C., elicited the information that while this disease had been reported from the North-eastern United States it was imperfectly known and its cause not yet ascertained. The prevailing impression in Northern Ontario seemed to be that this discoloration originated in late winter or early spring as an effect of frost, but observation proved that it developed in the new leaves in the latter half of July as they emerged from the buds or were as yet in an early stage of their growth, and experiments demonstrated that the symptoms progress slowly from the needle tips downward and may involve from a third to two-thirds or even the whole needle. Many of the blighted needles fall in August and September, but others adhere for a year or longer. One immediate applica-



10—Sand dune covering apple orchard.

tion of this information—already utilized—consists in the fact that it is now possible to recognize this malady as something distinguishable from sulphur fume injury with which it has been confused; and there is a call for such a diagnosis over an area of perhaps 20 miles in radius from roast bed centres.

“Needle blight” is extremely prevalent in the Timagami Forest Reserve. From elevations in the reserve thousands of yellowed trees may be seen, imparting to the normally sombre green coniferous forest the distinctly autumnal tint of a hardwood forest, an effect that is perhaps most pronounced in mid-August. I cannot state how widely spread it may be in Ontario, but I have detected some few cases in Cleland Township, near Sudbury, and some at various points as far south as Gravenhurst and Alliston, also four cases in Rondeau Park on Lake Erie. Trees of all ages are susceptible.

It now remains to be determined whether or not this disease is contagious, the extent of its prevalence, the rate of mortality caused by it, the time required for recovery from the malady, and its effects in such cases on the annual increment of wood. With these ends in view some inoculations were made, some hundreds of diseased trees were noted and marked with numbered metal disks, and a full census of all the white pines taken on a small selected plot.

As a result of the summer's work the following lines of inquiry are in project:

1. A completion of the investigation on the "needle blight" of the pine.
2. A study of the effects of sulphur fumes on pine and especially with reference to the winter roasting of ores.
3. An examination of a brown heart rot of pine, balsam, and spruce which is probably the most destructive agent operating in our northern forests. The special features to be examined refer to the rapidity of development of the decay, the manner and extent of its inroads, and the factors that are responsible for its greater prevalence in some districts than in others.
4. A more complete inventory of the diseases of the pines and the pulpwoods of Ontario."

You will notice that Dr. Faull has found no evidence of White Pine Blister Rust in the Timagami Forest Reserve. His work on "needle blight" and "brown heart rot" should be followed up until we can arrive at some definite conclusions.

I have the honour to be, Sir,

Your obedient servant,

E. J. ZAVITZ,
Provincial Forester.

Appendix No. 32.

RETURNED SOLDIERS AND SAILORS—LAND SETTLEMENT.

The Honourable, the Minister of Lands, Forests and Mines, Toronto.

SIR,—I have the honour to report as follows, with regard to the Provincial Scheme of Land Settlement for Returned Soldiers and Sailors.

The Land Settlement Scheme for returned soldiers and sailors was inaugurated in February, 1917, the aim of the scheme being to place returned men in considerable numbers on lands of the Crown in Northern Ontario.

For the present, six townships have been set aside for use in this connection, namely: O'Brien, Owens, Williamson, Idington, Cumming and Shackleton, located some sixty or seventy miles west of Cochrane on the line of the National Transcontinental Railway. These townships with the exception of Shackleton have been surveyed into lots containing 100 acres each instead of the ordinary homestead of 160 acres.

A Training School has been completed at Monteith thirty miles south of Cochrane, on the Temiskaming and Northern Ontario Railway, the school being located on the Government Demonstration Farm consisting of 800 acres. There is a clearing of very considerable size on this farm on which a number of the men have been given instruction in agriculture. They have also been instructed in land-clearing, logging, stumping, etc., on those portions of the farm which have not yet been fitted for the plough.

Briefly, the manner of handling the men is as follows:—Applications are listed in the Department of Lands, Forests and Mines, and from time to time the men are called up in parties of from twenty to forty for examination. Each man is examined by a competent physician to determine his physical fitness for farm work. After medical examination the applicants appear before a Committee on which is represented the Department of Lands, Forests and Mines, the Department of Agriculture, the Invalided Soldiers' Commission, the Great War Veterans' Association, the Soldiers' Aid Commission, the Canadian Patriotic Fund Committee and the Vocational Training Department. If the men pass the medical examination, and if their applications are approved by the members of the Committee mentioned above, they are deemed eligible to enter the scheme of land settlement. They are then sent forward to the colony located in the Township of O'Brien on the banks of the Kapuskasing River, where they immediately enter into the work which finally enables them to locate in their own houses on their individual holdings. At Kapuskasing they proceed to clear and fit for the plough ten acres on the front of each 100 acre lot—one lot being allowed to each prospective settler.

No charge is made for the land. During the period in which the men are engaged in clearing the ten acres on each lot, they are paid by the Department in one of two ways—either at a certain rate per hour or by contract at a certain figure per acre, determined by the conditions which attend the clearing of any particular lot.

At this point it might not be amiss to give a brief review of what has been accomplished at the Kapuskasing Colony. The Colony is situated on the east bank of the Kapuskasing River immediately south of the National Transcontinental Railway. The river is a stream of large size at this point, and the rapids which occur just at the railway bridge, add greatly to the natural beauty of the place and will doubtless ultimately figure in connection with power development. The following points might be noted:

(a) Nineteen frame houses of five or six rooms each have been erected in the form of a village along the east bank of the Kapuskasing River—the houses being generally occupied by returned men and their families while the necessary clearings are being made on their respective lots, and while the dwellings are being erected thereon. These houses are comfortable and are of good appearance.

(b) A large frame administration building and residence has been erected. This building is occupied partly as an office, and partly as a residence by some of the colony officials.

(c) A dormitory with a modern kitchen, dining room and recreation room has been erected. The living room is equipped with a piano, billiard table and gramophone, and an up-to-date supply of reading material is always available.

(d) Goods are supplied to members of the Colony from a store which has been erected by the Department. This store contains a large and well assorted stock, and goods are supplied to the members of the Colony at cost.

(e) A substantial frame storehouse at the terminus of the railway siding has been provided.

(f) A blacksmith shop has been erected and is in charge of a returned man who followed this trade previous to his enlistment.

(g) A large modern stable for the housing of stock has been erected on the Provincial Government farm. This farm consists of 600 acres, this land having been reserved adjacent to the village—approximately 125 acres will be placed under crop on this farm during the spring of 1919.

(h) A small sawmill has been erected on the east bank of the Kapuskasing River and is used in connection with the furnishing of a supply of lumber for the Colony. Lumber is disposed of to settlers at approximately cost price.

(i) A planing mill for the manufacturing of sash, doors, etc., has been installed and is in continuous operation.

(j) A modern steam laundry is in use for the benefit of the members of the colony.

(k) Approximately half a mile of railway siding has been constructed to connect the colony with the main line of the Transcontinental Railway. A passenger bridge over the Kapuskasing river is nearing completion.

(l) A modern two-roomed school, accommodating 80 pupils, has been opened, with two well qualified teachers in charge. The Public School Inspector for the district reports very favourably on the work which is being accomplished in this school. Three vans are used in conveying the pupils from their homes to the school and return. The expense of maintaining the school is, for the present, borne by the Department.

It will be understood that the men on going to the Colony leave their families in Southern Ontario. Fifty men can be housed at the dormitory, and when the men have had an opportunity to look over the situation, and have fully decided to remain with the scheme, the married members of the colony are permitted to move their families, as far as the accommodation permits, to the houses in the village.

The site of the Kapuskasing colony was selected in May, 1917, by the Minister. On July 13th, 1917, a party of four men left the Monteith Training School, in charge of Major Thos. L. Kennedy, and took up their residence at Kapuskasing. The remainder of the original party of men arrived at Kapuskasing on July 25th, 1917. Since that date, as you will note from the above, a great amount of work has been accomplished. Without going into too great detail, it might be said that good progress has been made in connection with the ten-acre clearings on the individual lots and approximately 60 settlers' houses have been erected. These houses are of substantial construction, and generally speaking cost from \$500.00 to \$700.00 each. Of the cost of the settlers' houses, \$150.00 is borne by the Department—the balance by the settler.

Seventy horses are kept at the settlement. These horses are available for the use of the settlers, as are also farm implements, wagons, sleighs, tractors, etc. It is further proposed to maintain at the colony farm a stock of cattle, sheep and swine.

Financial assistance is available to the settlers to the extent of \$500.00 to each man by way of a loan, secured by a lien on the land and chattels. Re-payment is extended over a period not to exceed 20 years, interest being charged at the rate of six per cent. per annum.

It is hoped to have all the men now at the Colony, settled in their own homes early in the spring of 1919. The completion of the ten-acre clearings will be vigorously proceeded with as weather conditions permit.

It is not proposed to issue a Patent for the holding of any individual until a period of five years from the time of his entry into the scheme has elapsed. The settler must reside on his land for at least six months in each year up to the time of the issue of Patent. Two acres must be cleared and cultivated annually—that is, the settler must clear and put under cultivation, before he can secure a Patent, ten acres in addition to the original ten acres cleared at the expense of the Crown. After being in residence for at least six months, and after

having cleared and put under cultivation two acres, in addition to the original ten acres, the timber other than pine passes to the settler. After six acres in addition to the original ten acres have been cleared and cultivated the pine timber also passes to the settler.

It is, of course, scarcely to be expected that a settler should be able to maintain his family entirely by his agricultural operations on a ten acre clearing. The land, however, is situated in the heart of the Clay Belt District, and is well wooded with spruce and other woods suitable for pulp. The removal and sale of pulpwood will afford a considerable income. A large pulp limit was recently sold in this vicinity and a large pulp mill will shortly be erected at Kapuskasing, which undoubtedly will be of inestimable benefit to the settlers. Further, there is a great amount of work to be done in connection with the building of roads, bridges, etc., so that it seems reasonable to assume that there will be an abundance of work for some time to come for such men as are willing to take advantage of same.

The following statistics are of interest in connection with the history of the scheme:

MONTETH TRAINING SCHOOL.

Total number who passed through school	88
Total number discharged from school	1
Total number who left school voluntarily	14
Total number who went to Kapuskasing Colony from the school	73

KAPUSKASING COLONY.

Total number of men from Monteith School	73
Total number of men sent direct to Colony	100
Total number discharged from Colony	12
Total number left owing to physical unfitness	30
Total number left owing to family difficulties	19
Total number left for other reasons	29

The previous occupations of the men who entered the scheme are given as follows:

Number of farmers	26	Number of engineers	3
Number of labourers	24	Number of butchers	3
Number of carpenters	16	Number of miners	4
Number of electricians	2	Number of moulders	5
Number of bakers	3	Number of lumbermen	4
Number of blacksmiths	4	Number of teamsters	3
Number of chauffeurs	3	Number of plumbers	4
Number of mechanics	9	Other walks of life	71
Number of clerks	4		

There have entered the scheme:

Married men	141	Widowers	4
Single men	43		

Nationalities are represented as follows:

English	98	Australian	1
Scotch	14	Norwegian	1
Irish	9	American	1
Canadian	61	Manx	1
Italian	1	Negro	1

83 men remain on the scheme at date.

It may seem from the above that the number of men whose connection with the scheme has been severed, is unduly large. However, it has been found that a good number of men have found themselves physically incapable of doing the necessary work involved in the clearing of land. Two hundred and fifty-five men who had applied to enter the scheme have at various times been requested to report for examination and have failed to respond.

This scheme of Land Settlement is unique in character and affords a practical demonstration of the colony plan of settlement, a subject which has been freely discussed but apparently never before thoroughly developed.

In addition it affords a practical demonstration of the agricultural possibilities of the Great Clay Belt, especially that portion of this splendid territory lying adjacent to the National Transcontinental Railway.

It will be appreciated that in a scheme of such magnitude as promises to be the case in this instance, changes of considerable consequence will have to be made from time to time. The men now at Kapuskasing will, of course, be settled in accordance with the terms laid down in the literature pertaining to the original scheme, but it is quite possible that it might be advisable to send future parties of men into the North under slightly different conditions. One of the objects which the Department has in view is to mitigate the loneliness of pioneer life, and the colony plan of settlement is succeeding very nicely in this respect. Again, the scheme places the settler in a comfortable home with a clearing of some size, which also acts as a fire guard, within a comparatively short time from the date of his arrival in the North. The settler also has the use of horses, implements, etc., as soon as needed.

It is hoped that in the near future it will be possible to take care of applicants more quickly than is possible at the present time. The greatly increased cost of labour and supplies of every description during the past few years has operated greatly against the scheme from a financial point of view. These difficulties will no doubt right themselves in a certain measure with the coming of peace, but undoubtedly the high rate of wages prevailing has had a tendency to make the scheme somewhat less attractive and more difficult to operate, than would have been the case under normal conditions.

In conclusion, mention might be made of the services of the late Colony Superintendent, Major Thos. L. Kennedy, of Dixie, Ont., also of Lieutenant-Colonel Robert Innes, late Director of Soldiers' Land Settlement, who is now with the Soldiers' Settlement Board, Ottawa. The work of settlement has been greatly assisted by the construction of colonization roads throughout the Township of O'Brien, under the supervision of Mr. C. H. Fullerton, Superintendent Colonization Roads.

H. M. ROBBINS,

Acting Deputy Minister Lands and Forests.

Toronto, October 31st, 1918.

Appendix No. 33.

WOOD-CUTTING IN ALGONQUIN PARK.

In the early part of the year 1918 the outlook was for a severe shortage of fuel. The war was at its height. There was no prospect of an early peace. The supply of coal from the mines in the United States was with difficulty being maintained, and owing to the movement of very large numbers of troops and an immense volume of war material, transportation conditions became extremely severe.

The Dominion Government had already taken the importation and distribution of coal under its control, and restrictions were placed upon the quantity, especially of anthracite, that individuals were allowed to buy and store, no one being permitted to obtain more than 70 per cent. of his normal supply for the winter of 1918-19. In short, the universal expectation was that fuel, especially for domestic consumption, would be extremely scarce, and that considerable inconvenience and even hardship would be the result.

Under these circumstances the Ontario Government deemed it wise to supplement the supplies of fuel, and to substitute wood for anthracite in the public institutions so far as this could be done, thus releasing an equivalent quantity of anthracite coal, and making it available for domestic consumption. Accordingly, it was decided to undertake wood-cutting operations on a large scale in Algonquin Provincial Park, where extensive tracts covered with birch, maple and beech existed, the property of the Crown, within easy hauling distance of the Canada Atlantic railway. An appropriation of \$100,000 was made by the Legislature to cover the cost of these operations and of other investigations into the fuel question. After public advertisement, contracts were let to the Randolph Macdonald Company, Limited, for the cutting of 10,000 cords of wood, and to B. Ivol for 6,000 cords. These were afterwards increased to 25,000 cords and 10,000 cords respectively. A wood-cutting gang was organized among the Park rangers under the direction of the Park Superintendent, G. W. Bartlett. Later in the year, in November, C. M. McConkey was also given a contract to cut in the month of December. Two railway sidings to facilitate shipment of wood were constructed at the Government's expense at Mile Posts 306 and 314 respectively, and a third siding at Algonquin Park headquarters was repaired and extended.

The privilege of cutting wood in the Park without charge was extended to the municipalities of Ontario. Several of them took advantage of the offer, and the cities of Hamilton, Kitchener, Barrie and Guelph and the town of Mimico let contracts for the cutting of considerable quantities of wood, aggregating some 10,000 or 11,000 cords. These operations were entirely distinct from those of the Government.

Owing to the unusually mild weather in the early part of the winter of 1918-19, continuing throughout January and even into February, and also to the cessation of the war by the signing of the armistice on the 11th of November, the fuel situation was materially modified. As compared with a winter of ordinary severity there has been a general saving of coal. Importations have been coming forward, and the coal dealers are now in a position to supply their customers with all their requirements without difficulty.

There was no longer the same necessity for cutting wood in Algonquin Park. The prices of labour, provisions and supplies generally were very high, and consequently the wood cutting operations have been expensive, the contract price being

\$6.75 per cord loaded on the cars in the Park. The freight charges work out to between \$3 and \$4 per cord on wood delivered at Toronto, Hamilton or similar points. The orders for wood from the Government institutions amounted to about 2,100 cords. This has all been shipped out, and by the end of January about 14,000 cords of wood remained in the Park. This, if the weather is favourable in the months of February and March, will all be hauled out and piled at the railway sidings before the snow goes away in the spring, so that it will be available for shipment during the coming season. The wood will have an opportunity to be seasoned, and will lose in weight, thus reducing the freight charges.

All cutting under contract was stopped at the end of January, and the headquarters gang will finish by the end of February.

T. W. GIBSON,

Deputy Minister of Mines.

Appendix No. 34.

FUEL SUPPLY—WOOD-CUTTING PERMITS TO MUNICIPALITIES.

In order to relieve the fuel situation the Department decided to grant permits to the Municipal Authorities to cut wood for the use of the citizens on lands of the Crown. Our agents were instructed to select areas upon which wood was chiefly suitable for the fuel purposes and only dry or fire killed timber was allowed to be cut for this purpose, and no sawlog timber was to be taken. The wood was to be free of Crown dues. It was the purpose of the Department, in issuing permits to municipalities, rather than to private individuals to make it possible for the citizens to obtain their fuel supply at the least expense.

A number of Municipalities availed themselves of this and made applications through the Crown Timber Agent for permits. Permits were granted to the Municipal Authorities of the Town of Kenora for an aggregate of 8,000 cords of wood, areas being selected by the Municipal Authorities and approved of by the Crown Timber Agent.

The Town of Keewatin was granted a permit covering 500 cords.

The Cities of Fort William and Port Arthur were each granted seven permits for a number of areas and locations, upon which they were allowed to cut the dry and fire killed wood.

The Municipal Authorities of Sault Ste Marie, were granted a permit to cut on lots 10 and 11 in the 6th Concession of Jarvis, an aggregate of 5,000 cords.

The Towns of Webbwood, Fort Frances, Blind River, Cobalt, North Bay, Thessalon and Haileybury applied for and were granted permits to cut sufficient wood to meet the requirements of their citizens.

JOHN HOUSER,
Chief Clerk.

ALBERT GRIGG,
Deputy Minister.

